# FH-B710/MHC-710

# SERVICE MANUAL

*AEP Model*
*U-10-MI*

*UK Model*
*U-10-MI*

- FH-B710 and MHC-710 are composed of following models.
  As for the service manual, it is issued for each component models, then, please refer to it.

COMPONENT MODEL NAME FOR FH-B710 and MHC-710

| System / Component | FH-B710 | MHC-710 |
|---|---|---|
| Tuner, deck CD, amplifier | HCD-H71 | HCD-H71M |
| Speaker system | SS-H71 | SS-H50 |

## SPECIFICATIONS

**General**

| Destination | Power requirements | Power consumption |
|---|---|---|
| AEP, G, IT, EE | 220 – 230V AC, 50/60Hz | 140 watts |
| UK | 240V AC, 50Hz | 250 watts |

Dimensions — Approx. 225 × 285 × 265 mm (w/h/d) incl. projecting parts and controls

Mass — Approx. 6.6 kg

**Accessories supplied**
AM loop antenna (1)
Remote commander (1)
Sony SUM-3 (NS) batteries (2)
FM lead anttena (1) (MHC-710 only)
Speaker cord (2) (MHC-710 : AEP model only)

Design and specifications subject to change without notice.

## PARTS LIST

NOTE:
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- G : Germany model
- EE : East European model
- IT : Italian model

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | ACCESSORIES & PACKING MATERIALS | |
| | | ********** | |
| | 1-466-957-11 | REMOTE COMMANDER (RM-S71) | |
| | 1-501-374-11 | ANTENNA, LOOP | |
| | 1-501-594-11 | ANTENNA (FM) (MHC-710) | |
| | 1-575-495-11 | CORD, SPEAKER (MHC-710:AEP) | |
| | 3-756-727-21 | MANUAL, INSTRUCTION (English) (UK, EE) | |
| | 3-756-727-41 | MANUAL, INSTRUCTION (French, German, Dutch, Portuguese) (AEP) | |
| | 3-756-727-51 | MANUAL, INSTRUCTION (Spanish, Italian) (AEP, IT) | |
| | 3-756-727-61 | MANUAL, INSTRUCTION (German) (G) | |
| | 3-756-727-71 | MANUAL, INSTRUCTION (Polish, Russian) (EE) | |
| | 4-942-762-11 | COVER (MLY), BATTERY (for RM-S71) | |
| * | 4-957-163-01 | INDIVIDUAL CARTON (FH-B710) | |
| * | 4-957-164-01 | INDIVIDUAL CARTON (MHC-710:AEP) | |
| * | 4-957-168-01 | CUSHION (for SS-H50/H71) | |
| * | 4-957-906-01 | CUSHION (FRONT) (for HCD-H71/H71M) | |
| * | 4-957-907-01 | CUSHION (REAR) (for HCD-H71/H71M) | |
| * | 4-957-908-01 | INDIVIDUAL CARTON (for HCD-H71M) (MHC-710:UK) | |

# MINI Hi-Fi COMPONENT SYSTEM

SONY®

MICROFILM

9-957-653-11

Sony Corporation
Audio Group

English
93B1953-1
Printed in Japan
© 1993.2
Published by Audio Corporate Planning Group

# HCD-H71/H71M

# SERVICE MANUAL

*AEP Model*
*E Model*
*Australian Model*
*Tourist Model*
*HCD-H71*
*AEP Model*
*UK Model*

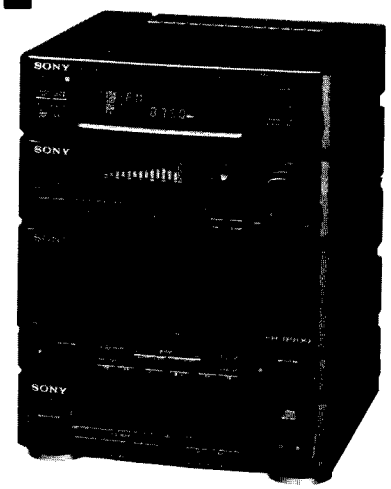

**Photo : E model**

**HCD-H71/H71M are the CD player and stereo deck receiver in FH-B710, FH-B900and MHC-710.**

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
" DOLBY" and the double-D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.

| | | | |
|---|---|---|---|
| CD SECTION | Model Name Using Similar Mechanism | | HCD-H61/H61M |
| | CD Mechanism Type | | CDM13B-5BD4E |
| | Base Unit Type | | BU-5BD4E |
| TAPE DECK SECTION | Model Name Using Similar Mechanism | | DXA-H2750 |
| | Tape Transport Mechanism Type | DECK-A | TCM-190RA12A |
| | | DECK-B | TCM-190RB22A |

## SPECIFICATIONS

### Tuner section

FM stereo, FM/AM superheterodyne tuner

**FM tuner section**

Tuning range
Except EE, JE model : 87.5 – 108.0 MHz
EE model : 65.0 – 74.0 MHz
87.5 – 108.0 MHz
JE model : 76.0 – 108.0 MHz
Antenna
HCD-H71 : Telescopic antenna
HCD-H71M : FM lead antenna
Antenna terminals 75 ohm unbalanced
Intermediate frequency 10.7 MHz

**AM tuner section**

Tuning range
AEP, UK, EE model : MW 531 – 1,602 kHz
LW 153 – 279 kHz
G model : AM 531 – 1,602 kHz
IT model : AM 522 – 1,611 kHz
AUS model : MW 531 – 1,602 kHz
SW 5.95 – 17.9MHz
E, EA, JE model : MW 531 – 1,602 kHz (at 9 kHz step)
MW 530 – 1,710kHz (at 10kHz step)
SW 5.95 – 17.9MHz
Antenna AM loop antenna
External antenna terminals
Intermediate frequency 450 kHz

### Amplifier section

AEP, UK, EE, G, IT model :
Continuous RMS power output:
40+40 watts (6 ohms at 1 kHz, DIN)
45+45 watts (6 ohms at 1 kHz, 5% THD)
Music power output:
80+80 watts (6 ohms at 1 kHz, 10% THD)
E, EA, AUS, JE model :
Continuous RMS power output:
45+45 watts (6 ohms at 1 kHz, 5% THD)
Peak music power output:
600 watts (4 speakers driven)

– Continued on next page –

MICROFILM

MINI Hi-Fi COMPONENT SYSTEM

SONY®

Inputs
E, EA, AUS, JE model
MIX MIC (minijack):
Sensitivity 1 mV,
impedance 600 ohms
VIDEO/AUX (phono jack):
sensitivity 250 mV,
impedance 47 kilohms
AEP, UK, EE, G, IT model :
PHONO (phono jack):
sensitivity 5 mV,
impedance 47 kilohms
Outputs
HEADPHONES (stereo minijack):
accept headphones of 8 ohms or more.
SPEAKERS: accept impedance of 6 to 16 ohms.
SURROUND SPEAKERS (only for E, EA, AUS, JE model) :
accept impedance of 8 to 16 ohms.

### Compact disc player section

System Compact disc digital audio system
Laser Semiconductor laser
Wavelength 780 – 790 nm

### Cassette deck section

Recording system
4-track 2-channel stereo
Frequency response
(DOLBY NR OFF)
60 – 13,000 Hz (±3 dB),
using TYPE I
cassette (Sony HF-S)
60 – 14,000 Hz (±3 dB),
using TYPE II
cassette (Sony UX-S)
Wow and flutter
0.1% WRMS ±0.3% (DIN)

### General

| Destination | Power requirements | Power consumption |
|---|---|---|
| AEP, EE, G, IT model | 220 – 230 V AC, 50/60 Hz | 140 W |
| UK model | 240 V AC, 50Hz | 250 W |
| AUS model | | 170 W |
| E, EA, JE model | 110 – 120/ 220 – 240 V AC, adjustable, 50/60Hz | 170 W |

Dimensions
Approx. 225 x 285 x 265 mm (w/h/d)
(8 7/8 x 11 1/4 x 10 1/2 inches)
incl. projecting parts and controls
Mass Approx. 6.6 kg (14 lb 8 oz)

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NOTE

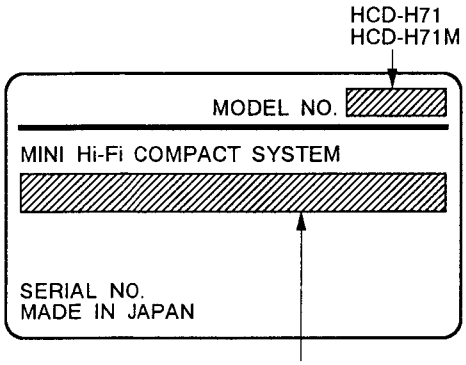
| | | | |
|---|---|---|---|
| EE | : East European | EA | : Saudi Arabia |
| G | : German | AUS | : Australian |
| IT | : Italian | JE | : Tourist |

**SAFETY-RELATED COMPONENT WARNING!!**

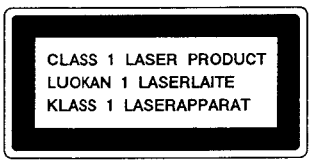
**COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

# SECTION 1
# SERVICING NOTE

## MODEL IDENTIFICATION
*– SPECIFICATION LABEL –*

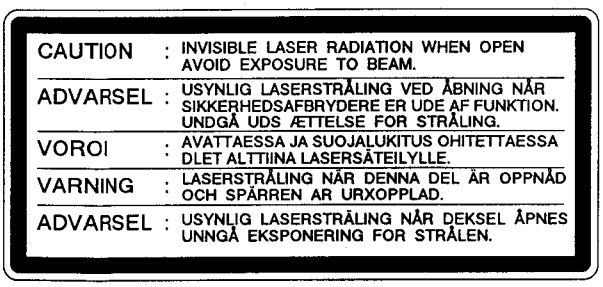



AEP, East European, German,
Italian model : AC 220 – 230 V ~, 50/60 Hz, 140 W
UK model : AC 240 V , 50 Hz, 250 W
E, Saudi Arabia,
Tourist model : AC 110 – 120, 220 – 240 V, 50/60 Hz
170 W
Australian model : AC 240 V, 50 Hz, 170W




This appliance is classiified as a CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

The following caution label is located inside of the unit.


CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VOROI : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA DLET ALTTIINA LASERSÄTEILYLLE.
VARNING : LASERSTRÅLING NÄR DENNA DEL ÄR OPPNÅD OCH SPÄRREN AR URXOPPLAD.
ADVARSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN.

## NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

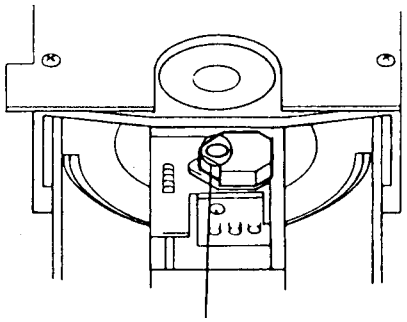
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

## NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 30 cm away from the objective lens.

## LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Make POWER switch on with no disc inserted and disc table closed.
2. Confirm that the following operation is performed while observing the objective lens.

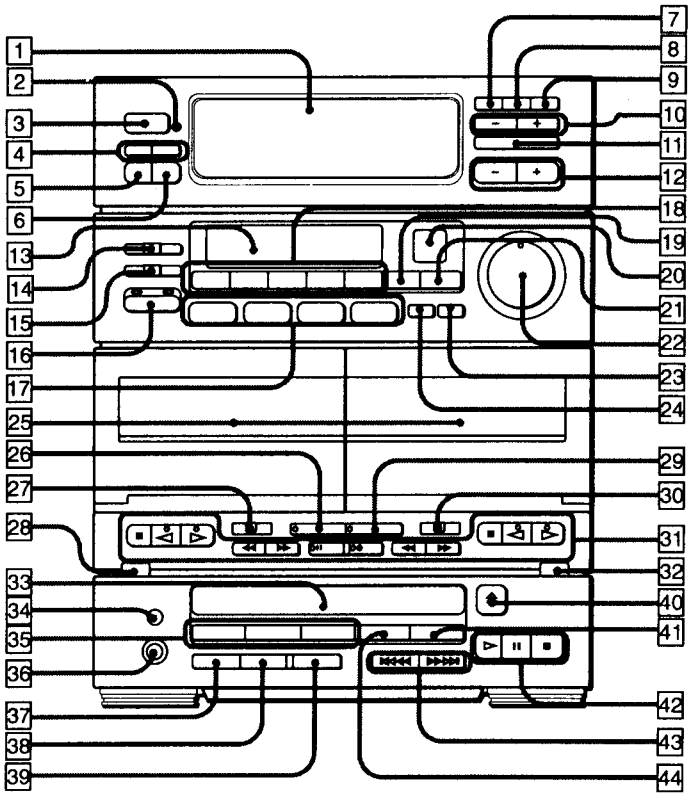


❶ Confirm that laser beam is spread.
❷ Up and downmotion of the objective lens. (3 times)

SECTION 2
GENERAL

This section is extracted from instruction manual.

# Parts Identification




## *Front Panel*

### Tuner Section

1 Display window
2 Remote sensor
3 POWER ON/STANDBY switch
4 CLOCK SET buttons
TIMER SET button
CLOCK DISPLAY button
5 TIMER CONT (control) button
6 SLEEP button
7 MEMORY/NEXT button
8 AUTO button
9 MODE button
10 TUNING –/+ buttons
11 BAND button (13)
12 PRESET/TIMER –/+ buttons

### Amplifier section

13 Equalizer display window
14 ECHO control (E, EA, AUS, JE model)
15 MIC LEVEL control (E, EA, AUS, JE model)
16 DBFB button and indicators
17 Function selecting buttons and indicators
Pressing these buttons with the power turned off automatically turns on the power, and select the function.
18 (AEP, UK, EE, G, IT model)
ROCK button
POPS button
JAZZ button
HALL button
BGM button
(E, EA, AUS, JE model)
MULTIPLEX buttons
STEREO button
MAIN button and indicator
SUB button and indicator
KARAOKE PON button and indicator
PRESET (preset equalizer setting) button
19 FILE button
20 CURSOR CONTROL lever
21 MEMORY button
22 VOLUME control
23 S-SUR (simulated surround) button and indicator
24 DIRECT button and indicator

### Cassette deck section

25 Cassette holders
26 HIGH SPEED DUBBING button and indicator
27 DIRECTION mode selector
28 ⏏ button (for deck A)
29 CD SYNCHRO (synchronized) button and indicator
30 DOLBY NR selector
31 Tape operating buttons
▷: Forward play button and direction indicator, ◁: Reverse play button and direction indicator, ▶▶: Fast rightward and AMS* button, ◀◀: Fast leftward and AMS* button, ■: Stop button, ●REC: Record button and indicator (for deck B only), ❚❚ PAUSE: Pause button and indicator (for deck B only)
32 ⏏ button (for deck B)

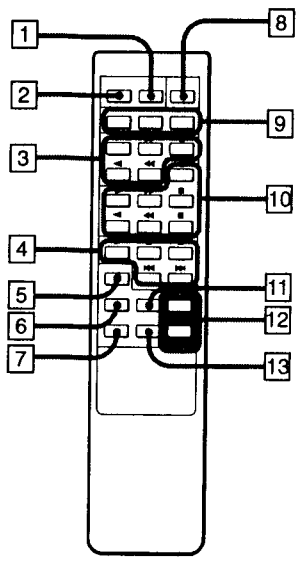
### CD player section

33 Disc tray
34 MIX MIC jack (E, EA, AUS, JE model)
35 PLAY MODE button
CONTINUE button
SHUFFLE button
PROGRAM button
36 HEADPHONES jack
37 CHECK button
38 CLEAR button
39 EDIT button
40 ⏏ OPEN/CLOSE button
41 TIME button
42 CD player operating buttons
▷: Play button, ❚❚: Pause button, ■: Stop button
43 ⏮◀◀/▶▶⏭ (manual search/AMS*) buttons
44 REPEAT button

** AMS is the abbreviation of Automatic Music Sensor.*

**Note:**
EE : East European
G : German
IT : Italian
EA : Saudi Arabia
AUS : Australian
JE : Tourist

# Clock Setting



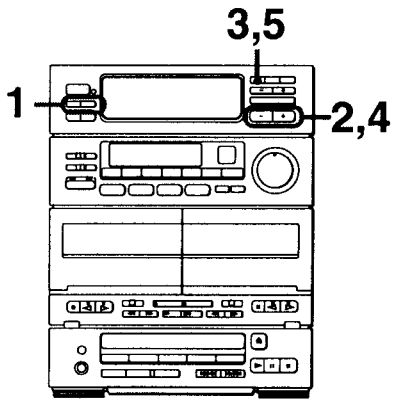

## *Remote commander*

1 SLEEP button
2 FUNCTION button
3 Deck A operating buttons
▶: Forward play button
◀: Reverse play button
▶▶: Fast rightward button
◀◀: Fast leftward button
■: Stop button
4 CD operating buttons
▶: Play button
I◀◀/▶▶I: AMS* buttons
II: pause button
■: Stop button
5 DISPLAY button
6 PRESET button
7 FILE button
8 SYSTEM POWER button
9 Tuner operating buttons
BAND button
PRESET – buton
PRESET + button
10 Deck B operating buttons
▶: Forward play button
◀: Reverse play button
▶▶: Fast rightward button
◀◀: Fast leftward button
II: pause button
■: Stop button
●REC: Record button
11 S-SUR button
12 VOL (volume) +/– buttons
13 DIRECT button

** AMS is the abbreviation of Automatic Music Sensor.*

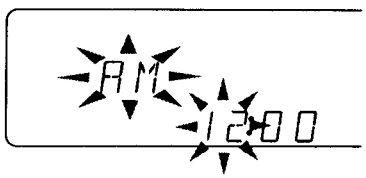
## *Setting the Clock*

The built-in clock shows the time in the display. Set the clock correctly to enjoy timer-activated features.
The time is shown in 12-hour cycle.
AM 12:00 = midnight
PM 12:00 = noon

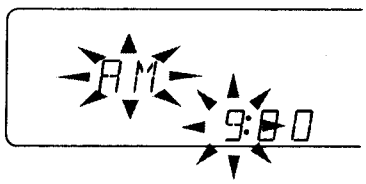



**Example:** Set to 9:25 in the morning.

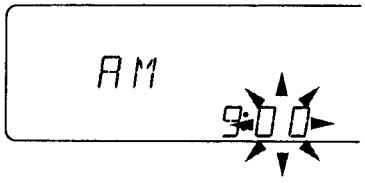
**1 Press TIMER SET and CLOCK DISPLAY at the same time.**
The hour indication starts flashing.



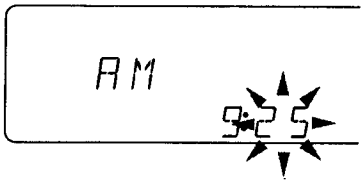

**2 Set the hour with PRESET/TIMER – or +.**



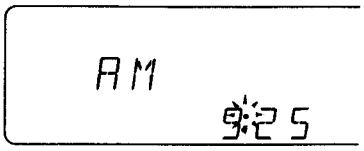

**3 Press MEMORY/NEXT.**
The minute indication starts flashing.




**4 Set the minute with PRESET/TIMER – or +.**




**5 Press MEMORY/NEXT.**
The clock starts running.




### To change to the clock display from other displays

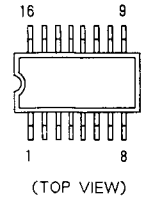
Press CLOCK DISPLAY.
The clock is displayed for about 4 seconds, then the clock display changes into normal display.

***When a power interruption occurs***
*The clock and timer settings are all erased, and "AM 12:00" will flash in the display.*

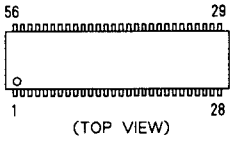
# SECTION 3
# DIAGRAMS

## 3-1. SEMICONDUCTOR LEAD LAYOUTS

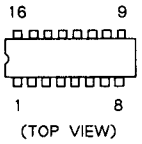
**CD4052BCM**



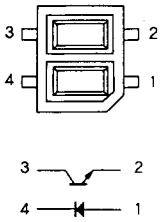

**HA12171NT**



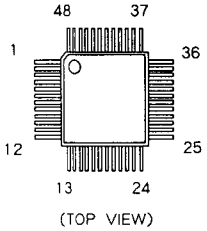

**M50253PK**
**MC14052BCP**
**XR1091DCP**



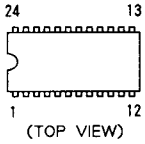

**NJL5165K-B**



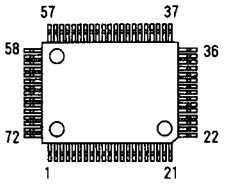

**CXA1372AQ**



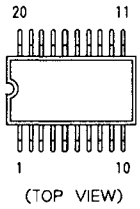

**LA1831**
**LC7218**
**M65831PK**



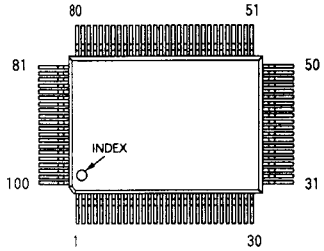

**M50964-260FPK**



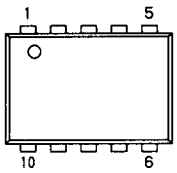

**PCM67U-B**



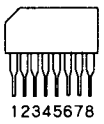

**CXA1492BQ**



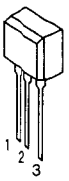

**LA5601**



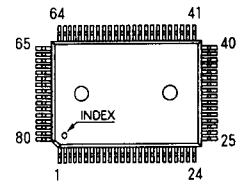

**M5230L-A**
**μPC1237HA**



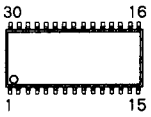

**PST572E**



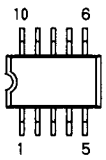

**CXD2500BQ**
**μPD78042GF-020-3B9**



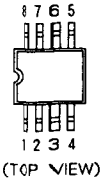

**LA6525M**



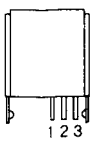

**M54641FP**



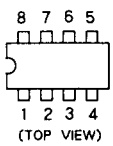

**RC4558PS**
**μPC4570G2**



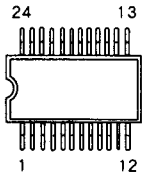

**GP1U90XB**



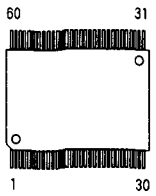

**LB1639**
**M5218AP**
**X24C01P**



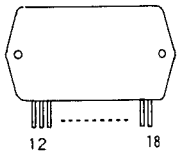

**MSM6538-01GS-VKR1**



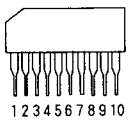

**SN755723FT**



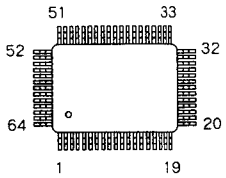
**STK4152MK2K**




**TA7272P**

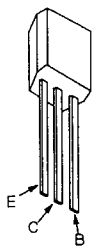



**μPD75116GF-F21-3BE**

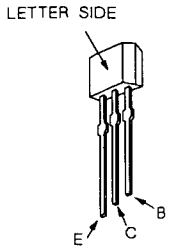



TOP VIEW

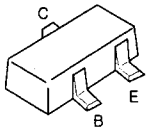
**DTA124ES**
**DTA144ES**
**DTC114ES**
**DTC144ES**
**2SC2603-EF**
**2SC2724-CD**



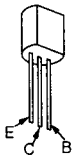

**UN4111**
**2SA1175-HFE**
**2SC3623A-LK**



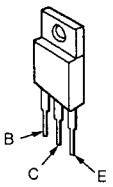

**2SA1602-F**
**2SC3395**
**2SC4154-F**



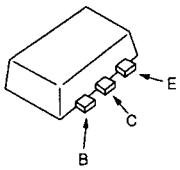

**2SB1013-4**
**2SC1841-PAFAEA**
**2SC3112-A**



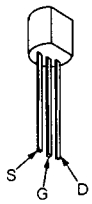

**2SB1094-LK**
**2SB1375-LC**
**2SD2012-LC**
**2SD2012**



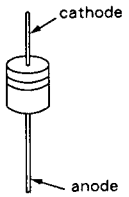

**2SD1622-S**



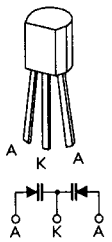

**2SK246-GR3**



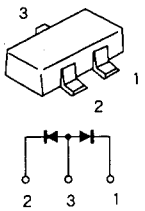

**HZS24-1L**
**HZS6C3L**



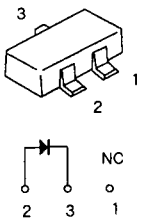

**KV1560N**



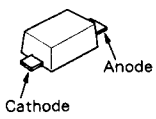

**MA152WA**



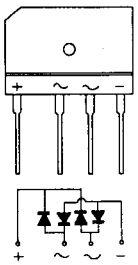

**MA3056-L**
**MA3062-L**



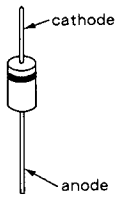

**MA8039**



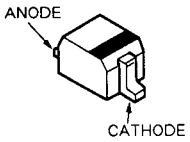

**RBA-402**



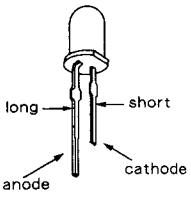

**UZL-12L3**
**1N4148M**
**10E2**




**1SS352**

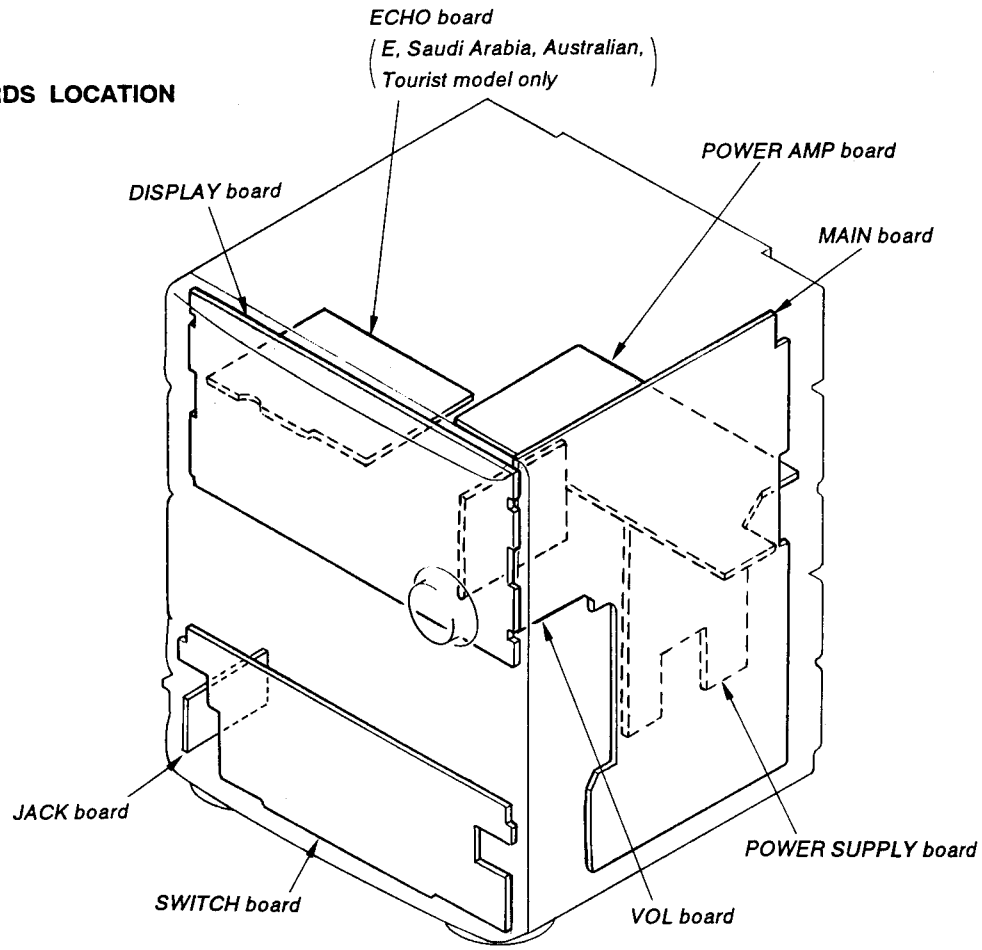



**SEL2210S-CD**
**SEL2210S-D**
**SEL5220S**
**SEL5420S**
**SEL5920A**

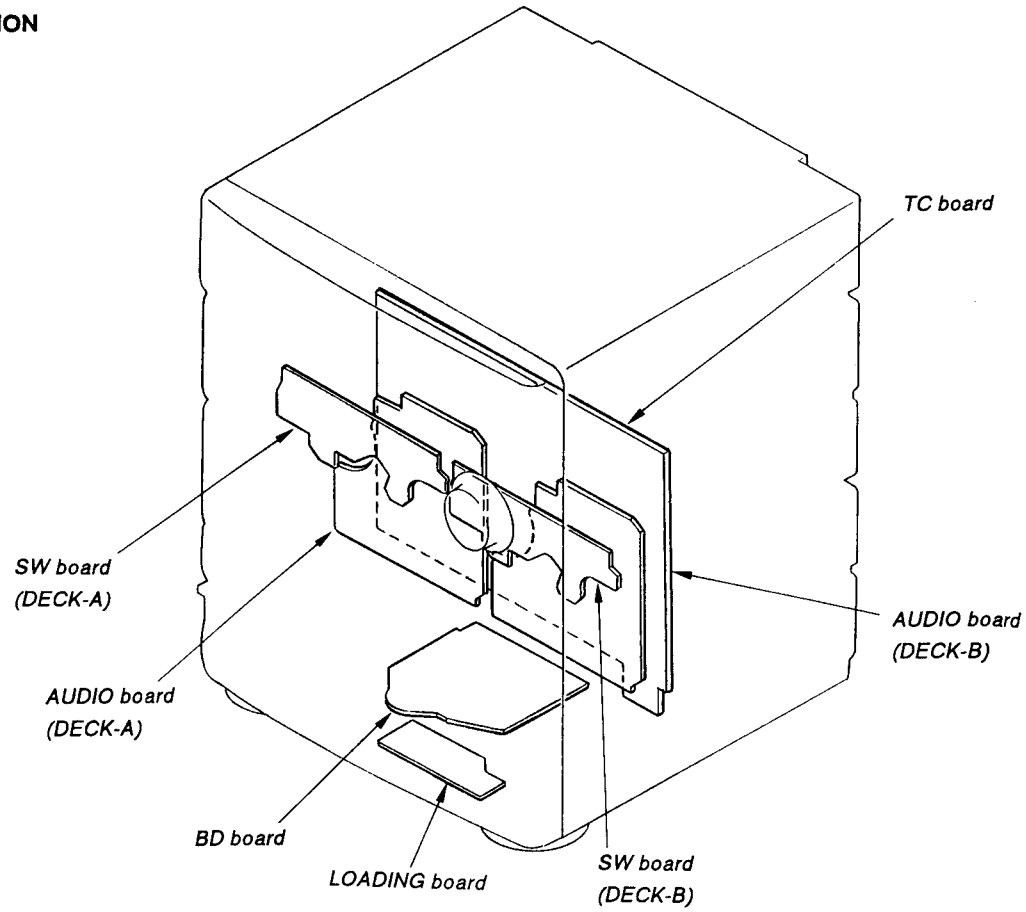


## 3-2. CIRCUIT BOARDS LOCATION

- **MAIN SECTION**

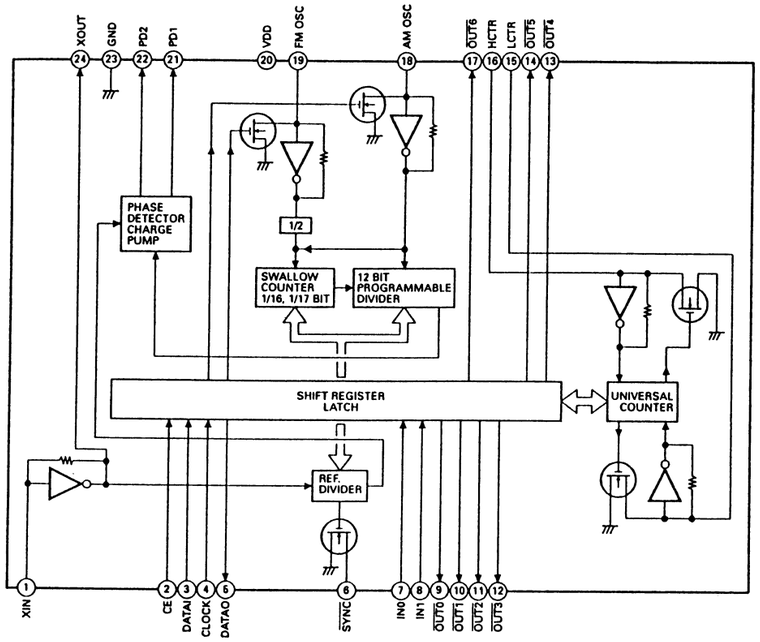



- **CD DECK SECTION**

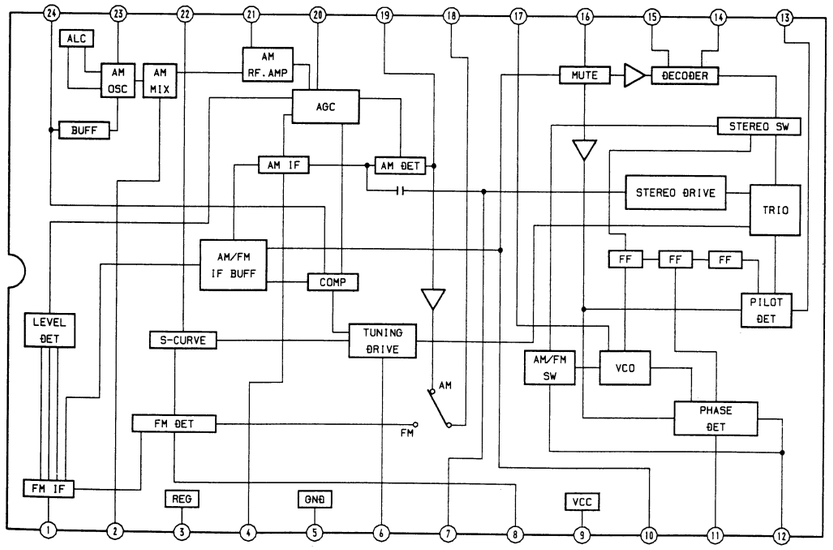


## 3-3. IC BLOCK DIAGRAM (MAIN SECTION)

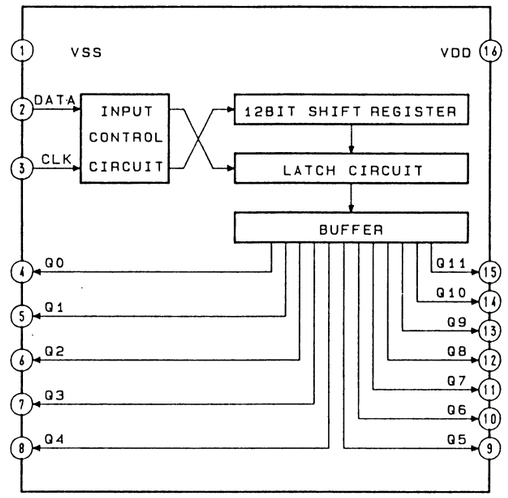
### IC1 LC7218



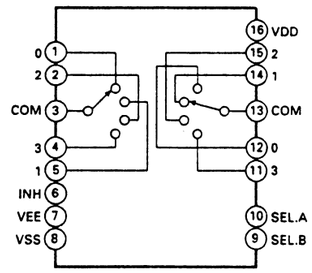

### IC2 LA1831



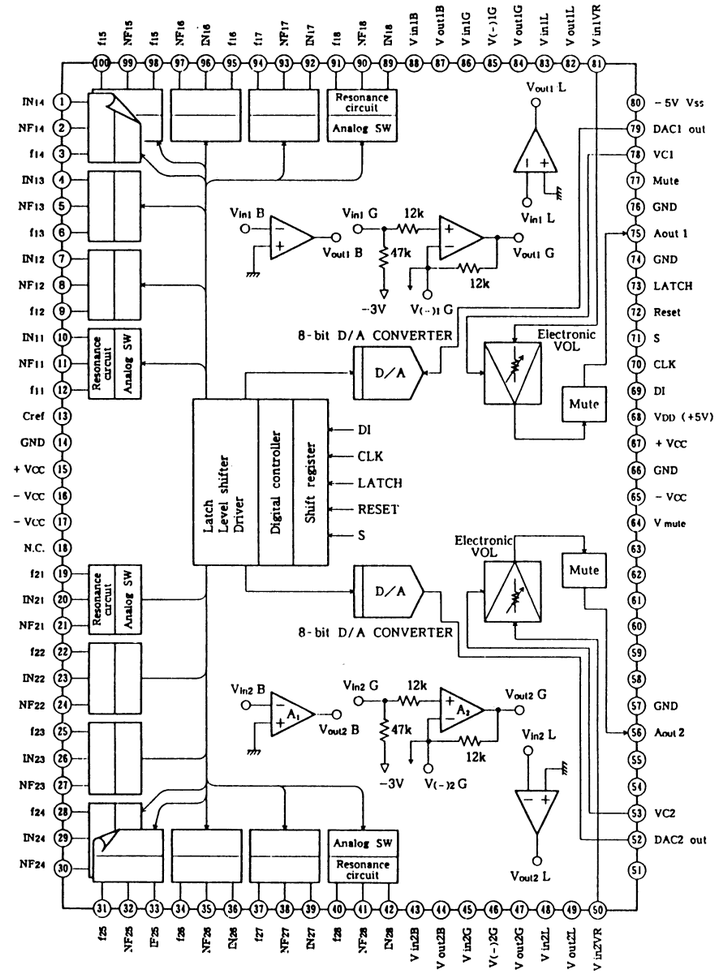

### IC581 M50253PK



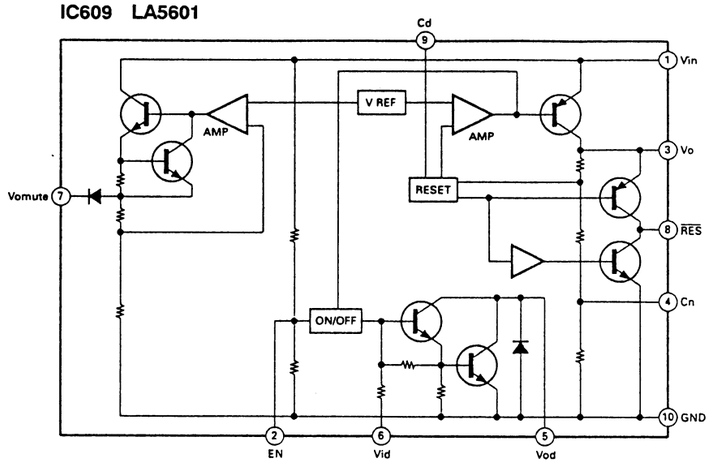

### IC602 MC14052BCP



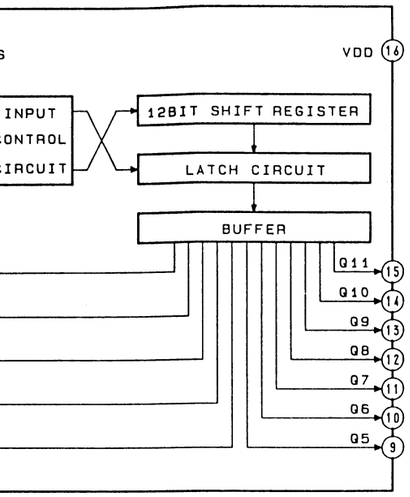

### IC607 CXA1492BQ



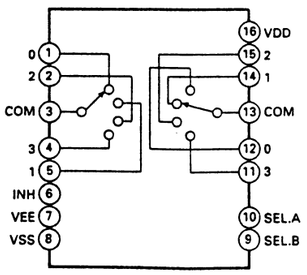

### IC609 LA5601



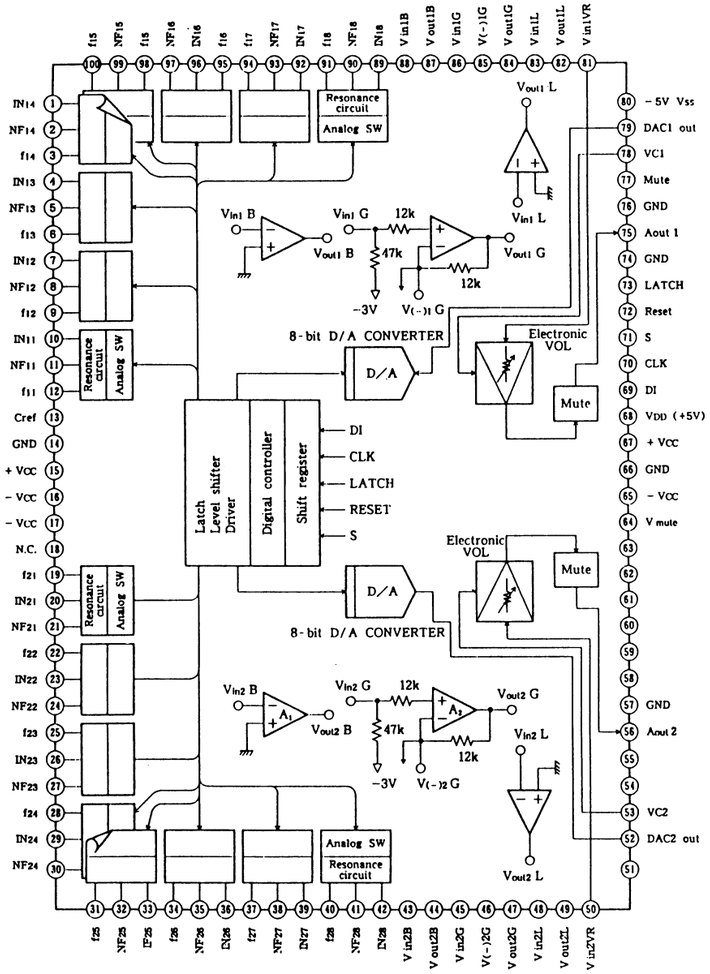
## M50253PK



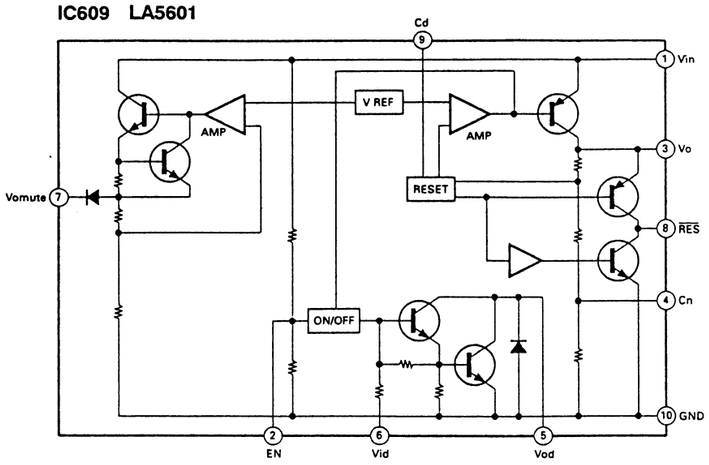

## IC602 MC14052BCP



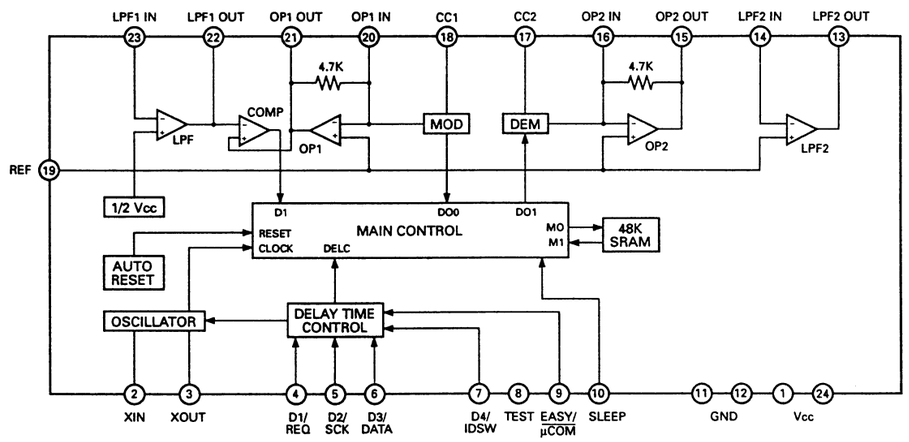

## IC607 CXA1492BQ



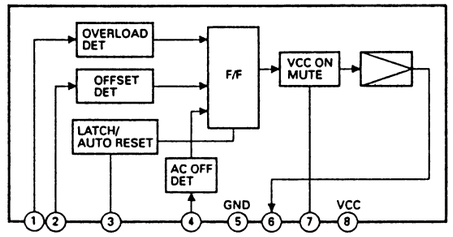

## IC609 LA5601



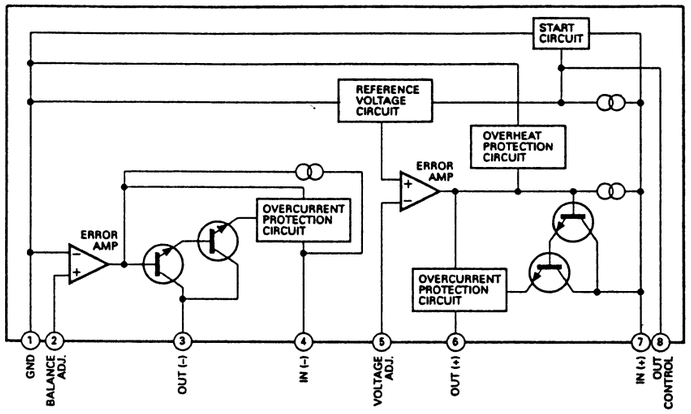

## IC610 M65831PK




## IC802 µPC1237HA




## IC901 M5230L-A



## 3-4. PRINTED WIRING BOARDS (MAIN SECTION)

**– AEP, UK, East European German, Italian MODEL –**

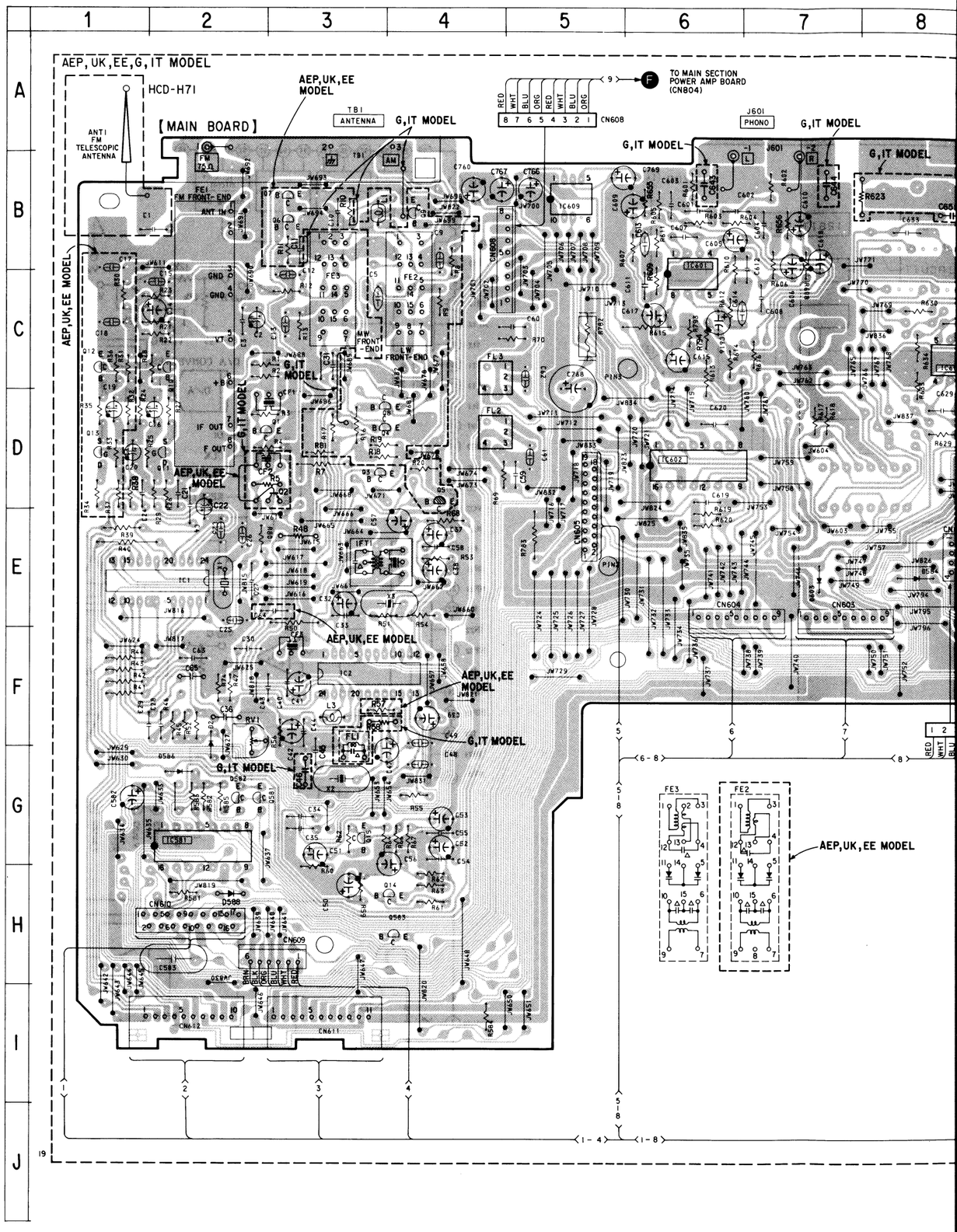
**• See page 6 for Semiconductor lead layouts and 8 for circuit boards location.**

**• Semiconductor Location (MAIN SECTION)**

| Ref. No. | Location |
|---|---|
| D2 | F-2 |
| D584 | E-8 |
| D586 | G-2 |
| D588 | H-2 |
| D601 | D-10 |
| D603 | E-7 |
| D604 | B-9 |
| D605 | B-9 |
| | |
| IC1 | E-2 |
| IC2 | F-3 |
| IC581 | G-2 |
| IC601 | C-6 |
| IC602 | D-6 |
| IC605 | C-8 |
| IC606 | C-11 |
| IC607 | E-10 |
| IC609 | B-5 |
| | |
| Q1 | D-2 |
| Q3 | D-3 |
| Q4 | D-3 |
| Q5 | D-4 |
| Q6 | B-3 |
| Q7 | B-3 |
| Q8 | D-3 |
| Q9 | B-4 |
| Q10 | C-2 |
| Q11 | D-2 |
| Q12 | C-1 |
| Q13 | D-1 |
| Q14 | H-4 |
| Q15 | G-3 |
| Q581 | G-2 |
| Q582 | G-2 |
| Q583 | H-4 |
| Q601 | C-11 |
| Q602 | C-11 |
| Q603 | C-10 |
| Q604 | C-12 |
| Q751 | E-9 |
| Q752 | E-9 |

**Note on Printed Wiring Board:**

- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ⊡— : indicates side identified with part number.
- ▨ : Pattern from the side which enables seeing.
- EE : East European
- G : German
- IT : Italian



lan MODEL –
youts

e.

er.
eing.

AEP,UK,EE,G,IT MODEL

HCD-H71

【MAIN BOARD】

ANT1 FM TELESCOPIC ANTENNA

AEP,UK,EE MODEL

TB1 ANTENNA

G,IT MODEL

RED WHT BLU ORG RED WHT BLU ORG 9 8 7 6 5 4 3 2 1 CN608 → F TO MAIN SECTION POWER AMP BOARD (CN804)

J601 PHONO

CN601 SPEAKER IMPEDANCE USE 6-16 Ω

BLU WHT RED ORG BLU WHT RED 11 10 9 8 7 6 5 4 3 2 1 CN602 → J TO MAIN SECTION POWER AMP BOARD (CN802)

FE1 FM FRONT-END

MW FRONT-END

LW FRONT-END

FE3

FE2

CN607 1 2 3 4 RED WHT BLU ORG

i-646-892-

AEP,UK,EE MODEL

8 → G TO MAIN SECTION POWER AMP BOARD (CN804)

4 → H TO MAIN SECTION POWER SUPPLY BOARD (CN913)

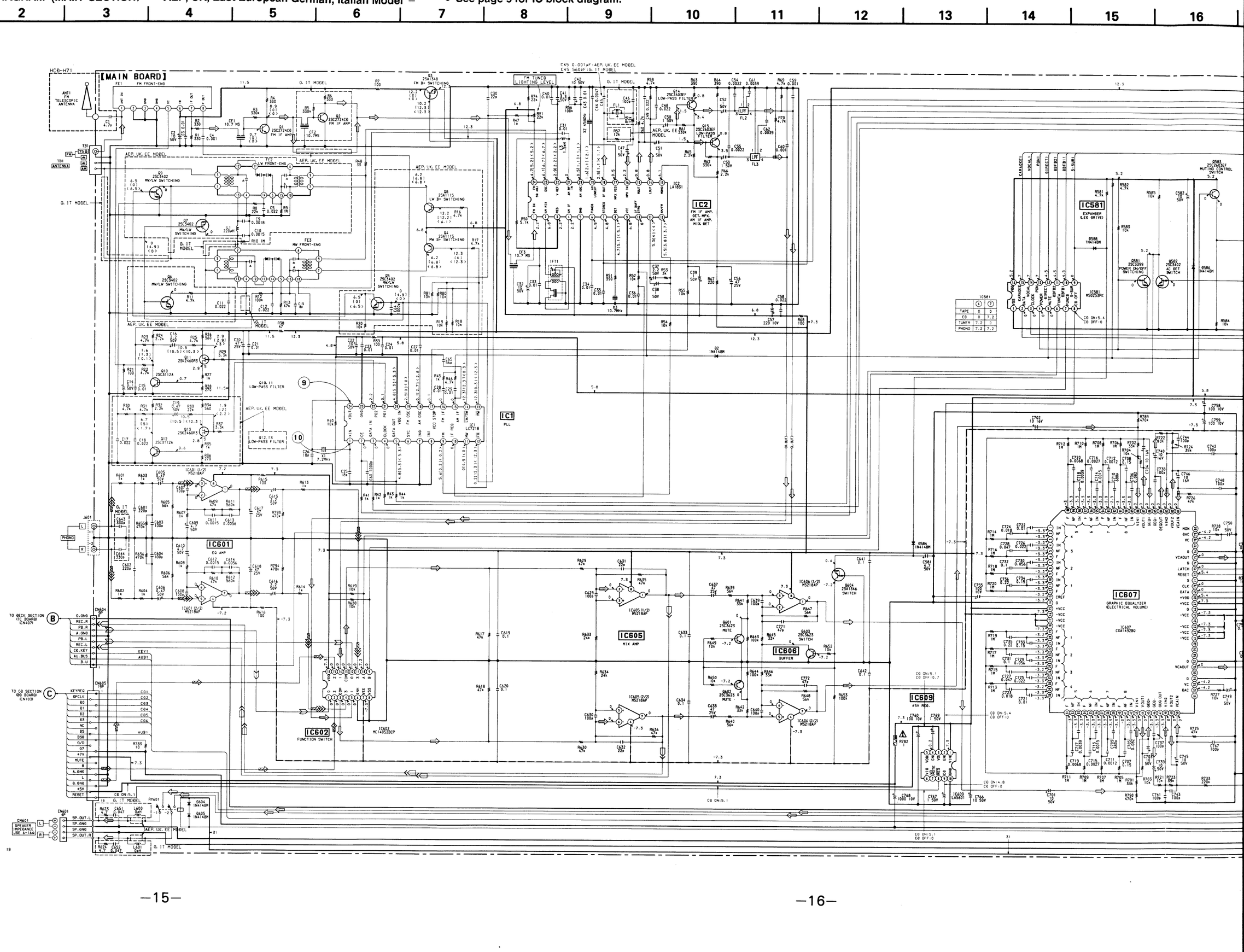
6,7 → C TO DECK SECTION TC BOARD (CN407,408)

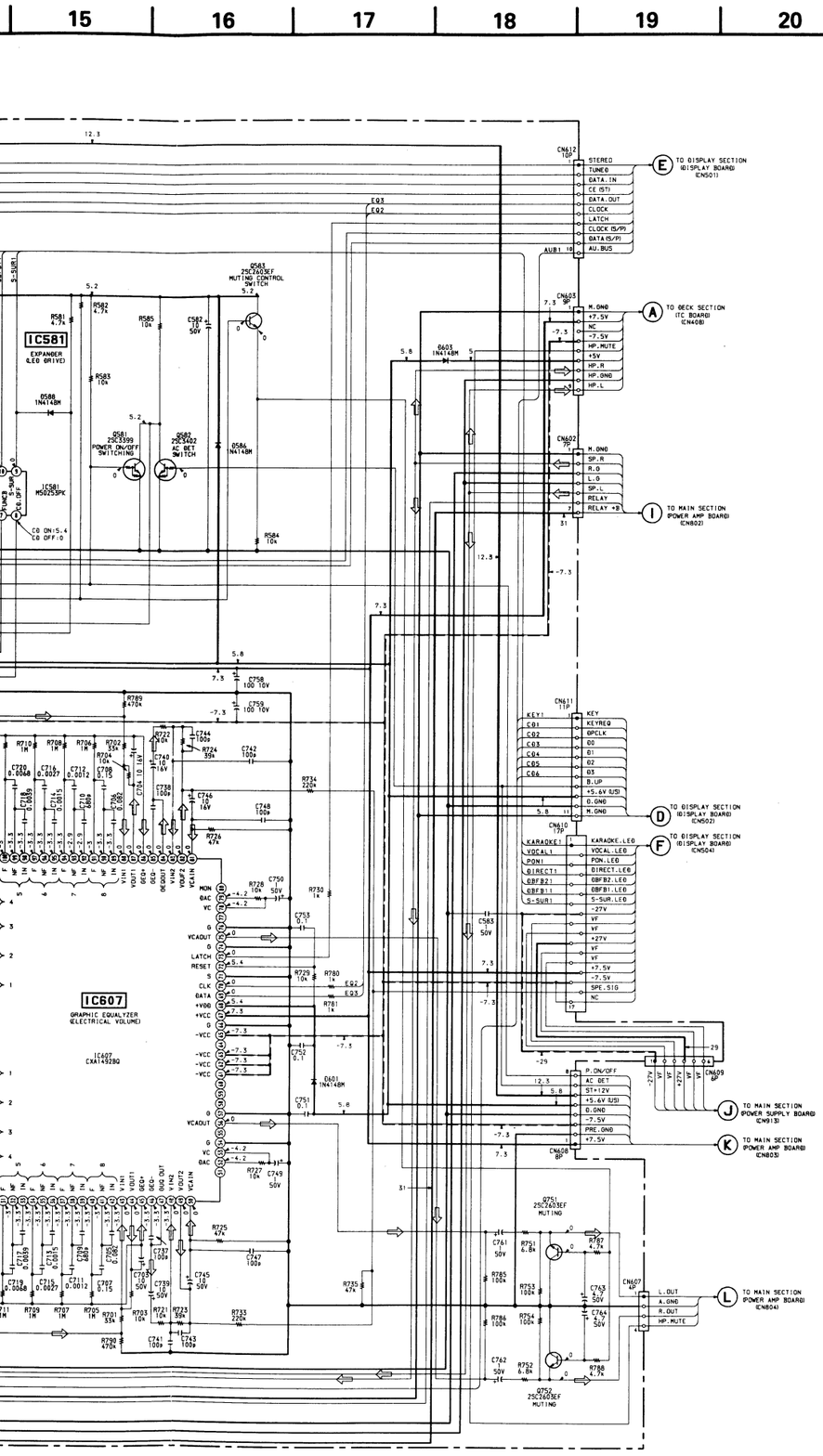
1-3 → D TO DISPLAY SECTION DISPLAY BOARD (CN501,502,504)

5 → E TO CD SECTION BD BOARD (CN103)

## 3-5. SCHEMATIC DIAGRAM (MAIN SECTION) – AEP, UK, East European German, Italian Model –

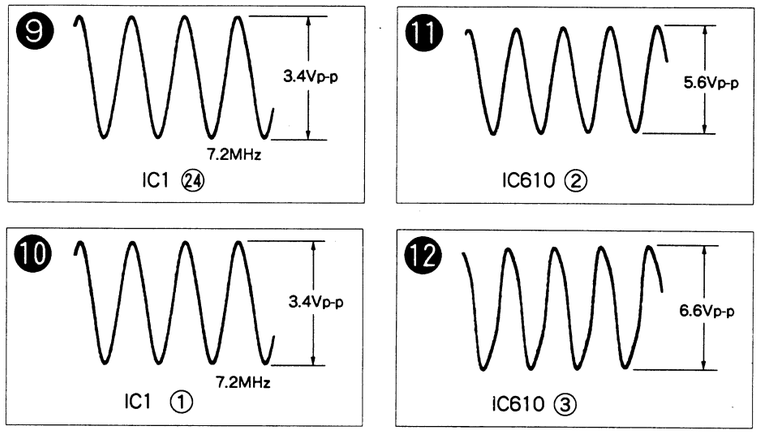
• See page 9 for IC block diagram.


[MAIN BOARD]
IC1 PLL
IC2 FM IF AMP, DET, MPX, AM IF AMP, MIX, DET
IC581 EXPANDER (LEO DRIVE)
IC601 EQ AMP
IC602 FUNCTION SWITCH
IC605 MIX AMP
IC606 BUFFER
IC607 GRAPHIC EQUALIZER (ELECTRICAL VOLUME)
IC609 +5V REG.
AEP, UK, EE MODEL
G. IT MODEL
FM TUNED LIGHTING LEVEL
C45 0.001μF-AEP, UK, EE MODEL
C45 560pF-G. IT MODEL
TO DECK SECTION (TC BOARD) (CN407)
TO CD SECTION (CD BOARD) (CN103)
SPEAKER IMPEDANCE USE 6-16Ω






- **WAVEFORMS**




**Note**
⑪, ⑫: E, East European, Tourist model only.

**Note on Schematic Diagram:**

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- ⚠ : fusible resistor.

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬▬ : B + Line.
- ▬ ▬ : B − Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark :FM
  ( ) :MW
  < > :SW
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ⇨ : CD
  ⇨ : PHONO
  ⇨ : TAPE (PB)
  ⇨ : TAPE (REC)
- EE : East European
- G : German
- IT : Italian

## 3-6. PRINTED WIRING BOARDS (MAIN SECTION)

– MAIN BOARD :
E, Sudi Arabia, Australian, Tourist Model only –

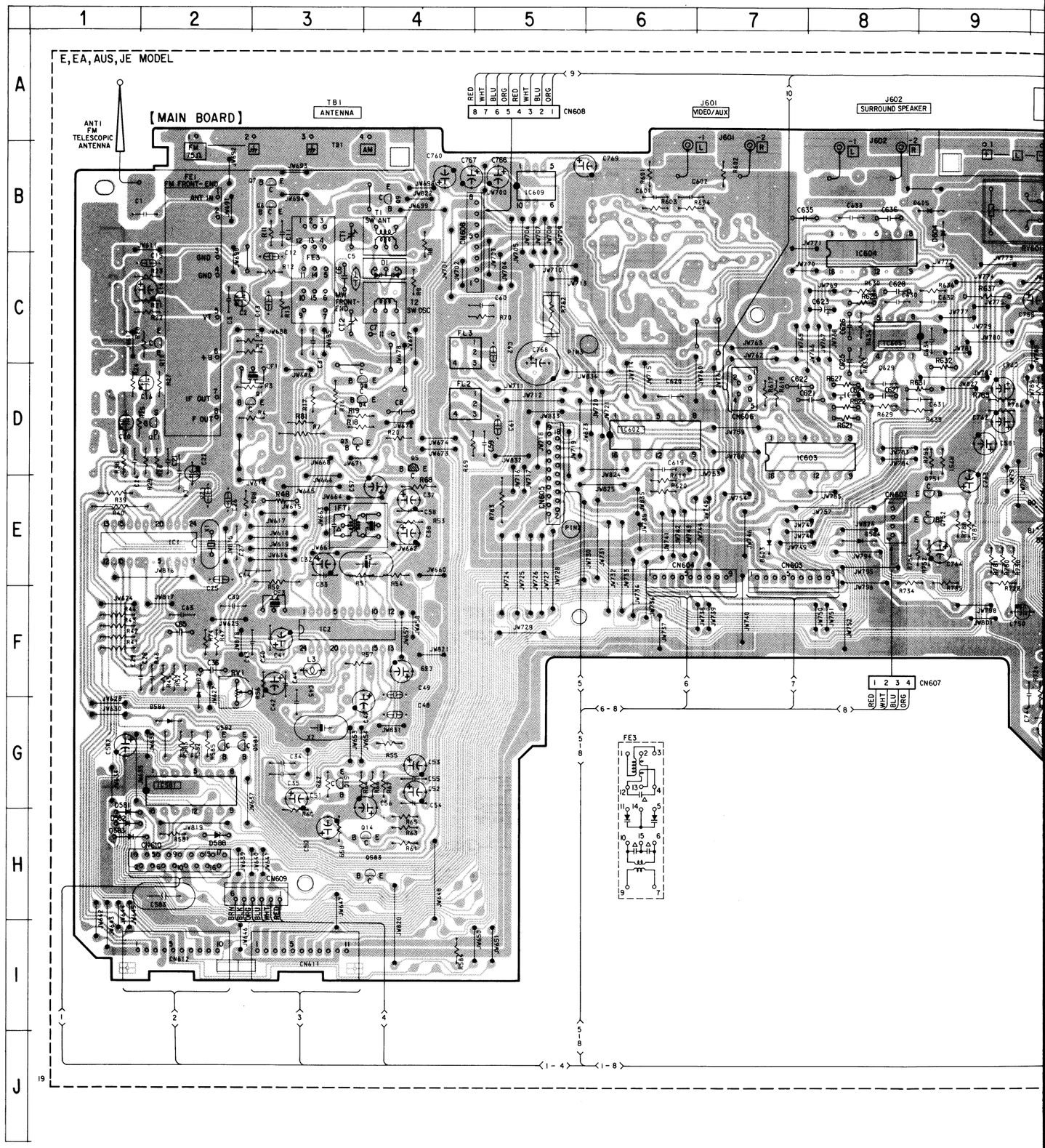
- See page 6 for semiconductor lead layouts and 8 for circuit boards location.

- Semiconductor Location (MAIN SECTION)

| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D2 | F-2 | Q1 | D-2 |
| D581 | H-1 | Q3 | D-3 |
| D582 | H-1 | Q4 | D-3 |
| D583 | H-1 | Q5 | D-4 |
| D584 | E-8 | Q6 | B-3 |
| D586 | G-2 | Q7 | B-3 |
| D588 | H-2 | Q8 | D-3 |
| D601 | D-10 | Q9 | B-4 |
| D603 | E-7 | Q10 | C-2 |
| D604 | B-9 | Q11 | D-2 |
| D605 | B-9 | Q14 | H-4 |
| D610 | B-13 | Q15 | G-3 |
| D801 | H-13 | Q581 | G-2 |
| D851 | H-14 | Q582 | G-2 |
| D901 | F-16 | Q583 | H-4 |
| D902 | F-16 | Q601 | C-11 |
| D903 | G-17 | Q602 | C-11 |
| D904 | G-17 | Q603 | C-10 |
| D905 | G-18 | Q604 | C-12 |
| D906 | G-18 | Q751 | E-9 |
| D907 | G-14 | Q752 | E-9 |
| D908 | F-13 | Q801 | H-13 |
| D909 | G-15 | Q802 | H-14 |
| D910 | G-14 | Q850 | H-14 |
| D911 | G-18 | Q901 | F-14 |
| (POWER AMP BOARD) | | Q902 | G-15 |
| D911 | C-19 | Q903 | I-16 |
| (POWER SUPPLY BOARD) | | Q904 | I-17 |
| D912 | D-18 | Q905 | F-13 |
| D913 | C-17 | Q906 | G-13 |
| | | Q907 | G-14 |
| IC1 | E-2 | Q908 | F-13 |
| IC2 | F-3 | Q909 | F-14 |
| IC250 | G-21 | Q911 | D-18 |
| IC581 | G-2 | Q912 | C-18 |
| IC602 | D-6 | | |
| (MAIN BOARD) | | | |
| IC602 | D-15 | | |
| (ECHO BOARD) | | | |
| IC603 | D-8 | | |
| IC604 | B-8 | | |
| IC605 | C-8 | | |
| IC606 | C-11 | | |
| IC607 | E-10 | | |
| IC609 | B-5 | | |
| IC610 | B-15 | | |
| IC801 | I-15 | | |
| IC802 | H-13 | | |
| IC901 | G-15 | | |

**Note on Printed Wiring Board:**

- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- : indicates side identified with part number.
- : Pattern from the side which enables seeing.
- EE : East European
- G : German
- IT : Italian
- EA : Saudi Arabia
- AUS : Australian
- JE : Tourist



J602
SURROUND SPEAKER

CN601
SPEAKER IMPEDANCE USE 6-16Ω

CN602
BLU WHT RED ORG BLU WHT RED
7 6 5 4 3 2 1

E,EA,AUS,JE MODEL
【ECHO BOARD】
1-644-099-

E,EA,JE MODEL
【POWER SUPPLY BOARD】
AC IN
CNP901
S901
VOLTAGE SELECTOR
110V-120V — 230V-240V
T901
POWER TRANSFORMER
※ NOT REPLACEABLE: BUILT IN TRANSFORMER
1-646-898-

A TO DECK SECTION TC BOARD (CN409)
B TO DISPLAY SECTION DISPLAY BOARD (CN505)
H TO MAIN SECTION MAIN BOARD (CN609)
AEP,UK,EE,G,IT MODEL
E,EA,AUS,JE MODEL

E,EA,AUS,JE MODEL
TO MAIN SECTION MAIN BOARD (CN608) F
AEP,UK,EE,G,IT MODEL
AEP,UK,EE,G,IT MODEL
TO MAIN SECTION MAIN BOARD (CN607) G
E,EA,AUS,JE MODEL
CN803
8 7 6 5 4 3 2 1
RED WHT BLU ORG RED WHT BLU ORG
CN804
1 2 3 4
RED WHT BLU ORG

【POWER AMP BOARD】
CN607
1 2 3 4
RED WHT BLU ORG
CN802
7 BLU
6 WHT
5 RED
4 ORG
3 BLU
2 WHT
1 RED
(CHASSIS)
1-646-893-

E,EA,AUS,JE MODEL
TO MAIN SECTION MAIN BOARD (CN602) J
AEP,UK,EE,G,IT MODEL
E,EA,AUS,JE MODEL

【JACK BOARD】
1-646-897-
J251
HEADPHONES
J261
MIX MIC
E,EA,AUS,JE MODEL

C TO DECK SECTION TC BOARD (CN 407,408)
D TO DISPLAY SECTION DISPLAY BOARD (CN 501,502,504)
E TO CD SECTION BD BOARD (CN 103)

## 3-7. SCHEMATIC DIAGRAM (MAIN SECTION) – MAIN BOARD :E, Saudi Arabia, Australian, Tourist Model –

• See page 9 for IC block diagram and 18 for waveforms.

【MAIN BOARD】

IC1 PLL

IC2 FM IF AMP, DET, MPX, AM 1F AMP, MIX DET

IC581 EXPANDER (LED DRIVE)

IC602 FUNCTION SWITCH

IC603 MATRIX SWITCH (MAIN/SUB)

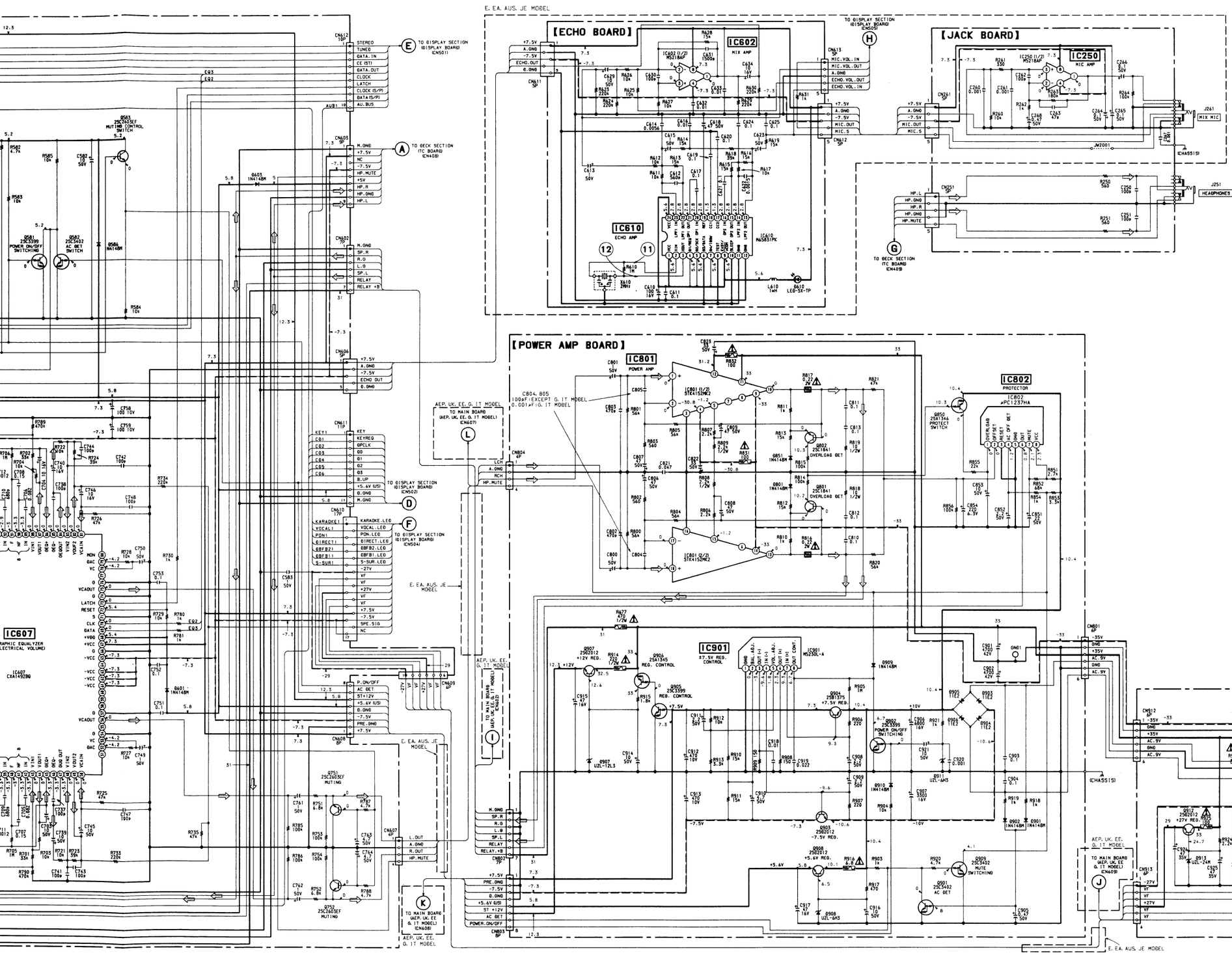
IC604 KARAOKE PGN SWITCH

IC605 MIX AMP

IC606 BUFFER

IC607 GRAPHIC EQUALIZER (ELECTRICAL VOLUME)

IC609 +5V REG.




**Note on Schematic Diagram:**

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- : B + Line.
- : B − Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark :FM
  ( ) :MW
  < > :SW
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : FM
  : CD
  : PHONO
  : TAPE (PB)
  : TAPE (REC)
- EE : East European
- G : German
- IT : Italian
- EA : Saudi Arabia
- AUS : Australian
- JE : Tourist

## 3-8. ORINTED WIRING BOARDS (DECK SECTION)

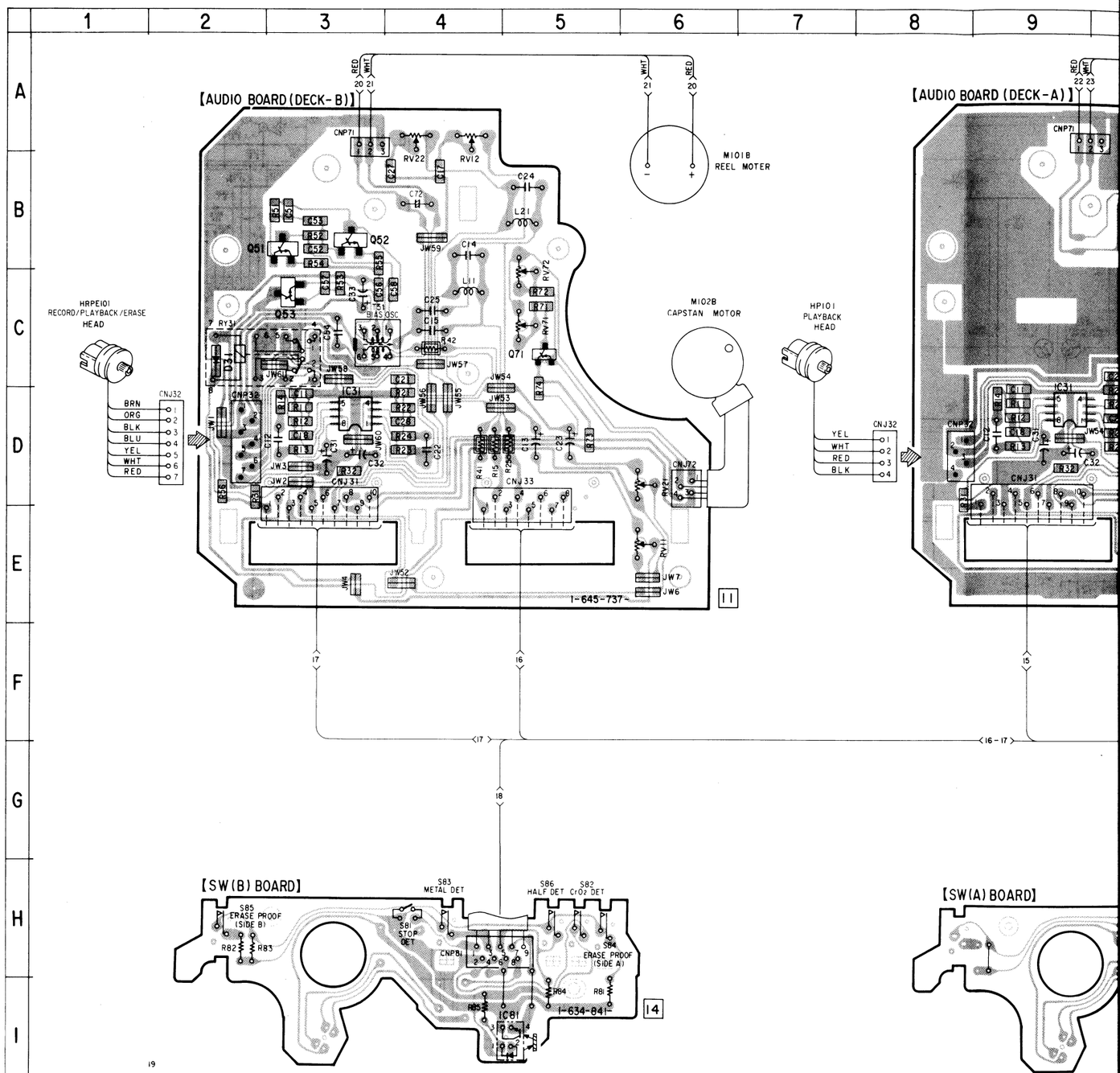
- **See page 6 for Semiconductor lead layouts and 8 for circuit boards location.**

- **Semiconductor Location (DECK SECTION)**

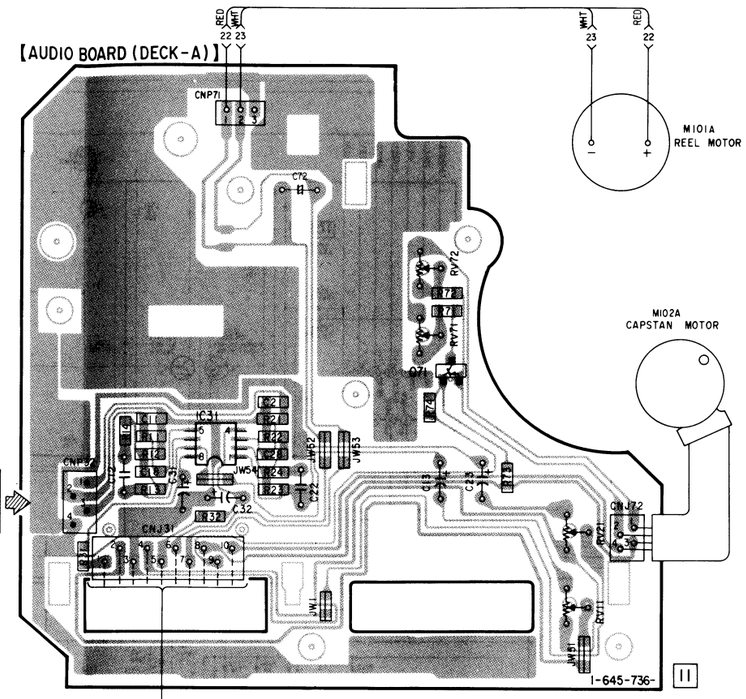
| Ref. No. | Location |
|---|---|
| D31 | C-2 |
| D301 | E-17 |
| D302 | D-17 |
| D351 | B-15 |
| D402 | E-19 |
| D403 | E-17 |
| D551 | G-21 |
| D552 | G-21 |
| D553 | G-19 |
| D555 | G-18 |
| D556 | H-18 |
| D557 | G-15 |
| D558 | G-14 |
| D559 | H-18 |
| | |
| IC31 (DECK A) | D-9 |
| IC31 (DECK B) | D-3 |
| IC81 (DECK A) | I-11 |
| IC81 (DECK B) | I-5 |
| IC401 | B-16 |
| IC402 | B-15 |
| IC403 | B-20 |
| IC404 | C-15 |
| | |
| Q51 | B-3 |
| Q52 | B-3 |
| Q53 | C-3 |
| Q71 (DECK A) | C-11 |
| Q71 (DECK B) | C-5 |
| Q101 | B-18 |
| Q201 | A-18 |
| Q305 | A-15 |
| Q306 | E-16 |
| Q400 | D-20 |
| Q401 | B-17 |
| Q402 | B-18 |
| Q403 | B-17 |
| Q404 | B-16 |
| Q405 | B-15 |
| Q407 | B-15 |
| Q408 | E-18 |
| Q411 | E-18 |
| Q412 | E-17 |
| Q413 | C-17 |
| Q414 | C-17 |
| Q415 | B-17 |

**Note on Printed Wiring Board:**

- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ⊡— : indicates side identified with part number.
- ▒▒▒ : Pattern from the side which enables seeing.



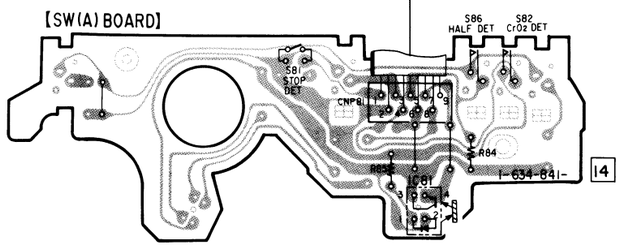
【AUDIO BOARD (DECK-A)】



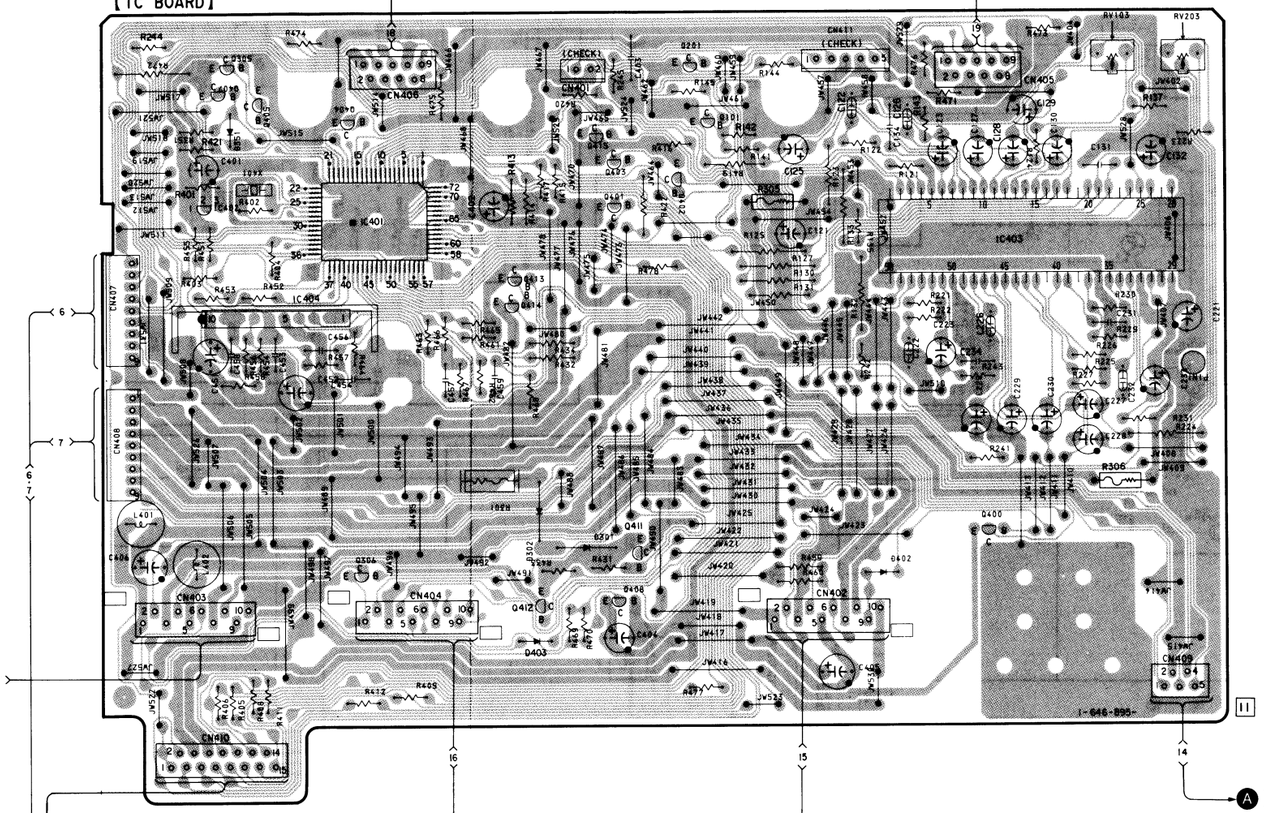

M101A
REEL MOTOR

M102A
CAPSTAN MOTOR

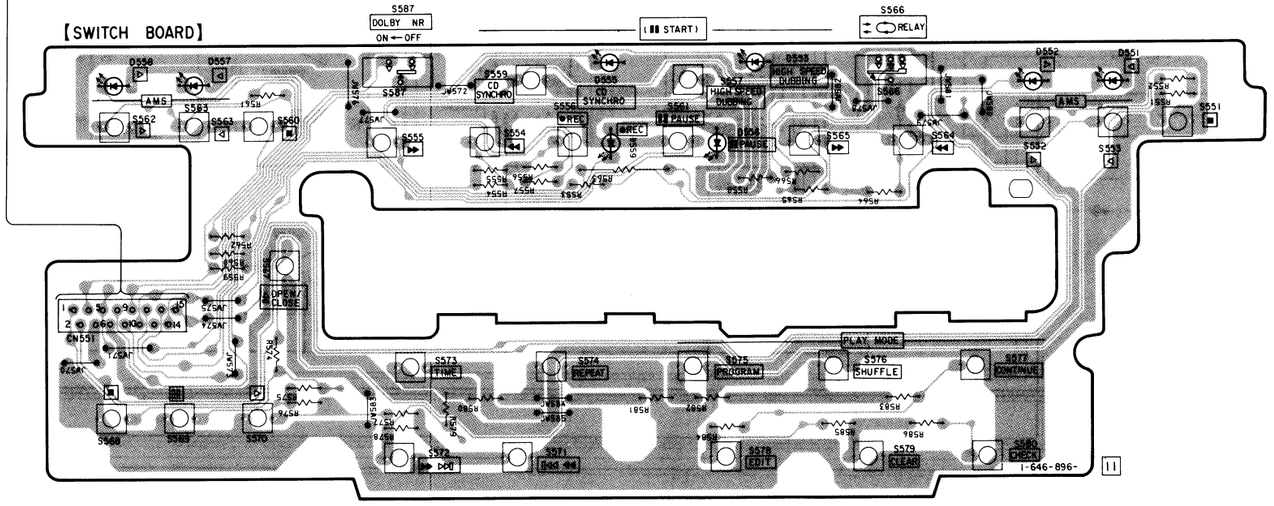
【SW(A) BOARD】




【TC BOARD】




【SWITCH BOARD】




DECK B — DECK A

CD

16-17 15-18 15-19 15-16 18-19 6-7

A To MAIN SECTION JACK BOARD (CN251)

C To MAIN SECTION MAIN BOARD (CN603, 604)

## 3-9. SCHEMATIC DIAGRAM (DECK SECTION)

【TC BOARD】

【SWITCH BOA

IC403 HA12171NT DOLBY NR. REC EQ AMP. AMS

IC402 PST572E-T RESET

IC401 M50964-260FPK DECK SECTION SYSTEM CONTROL

IC404 (1/2) TA7272P REEL MOTOR DRIVE

Q411, 412 CAPSTAN MOTOR DRIVE

Q413, 414 CAPSTAN MOTOR SPEED CONTROL (HIGH/NORMAL)

Q306 2SC2603EF REC BIAS SWITCH CONTROL

Q201 2SC2603EF LINE MUTE

Q101 2SC2603EF LINE MUTE

Q415 2SC2603EF LINE MUTE CONTROL SWITCH

Q400 2SA1348 AMS BUFFER

Q305 2SC3402 AUDIO BUS BUFFER

Q401 DUBBING SPEED SWITCHING (HIGH/NORMAL)

Q403 DECK SELECT SWITCHING (DECK-A/B)

Q404 2SA1345 BIAS ON/OFF SWITCHING

Q405 2SA1345 AUDIO BUS BUFFER

Q402 REC/PB SWITCHING

Q407 2SC3399 AUDIO BUS BUFFER

Q408 2SA1345 RELAY DRIVE (REC/PB)

CN411 5P — REC (R), REC (L), A.GND, PB (R), PB (L) } FOR CHECK

CN407 9P — B.U, AU.BUS, CO.KEY, REC.L, PB.L, A.GND, PB.R, REC.R, D.GND → (B) TO MAIN SECTION (MAIN BOARD) (CN604)

CN408 9P — M.GND, +7.5V, NC, -7.5V, HP.MUTE, +5V, HP.R, HP.GND, HP.L → (A) TO MAIN SECTION (MAIN BOARD) (CN603)

CN409 5P — HP.L, HP.GND, HP.R, HP.GND, HP.MUTE → (G) TO MAIN SECTION (JACK BOARD) (CN251)

CN402 10P — +7.5V, L-CH (PB), GND, R-CH (PB), -7.5V, REEL (+), REEL (-), CM+, HIGH, CM-

CN403 10P — +7.5V, L-CH (PB), GND, R-CH (PB), -7.5V, REEL (+), REEL (-), CM+, HIGH, CM-

CN404 10P — BIAS, L-CH (REC), GND, R-CH (REC), RELAY

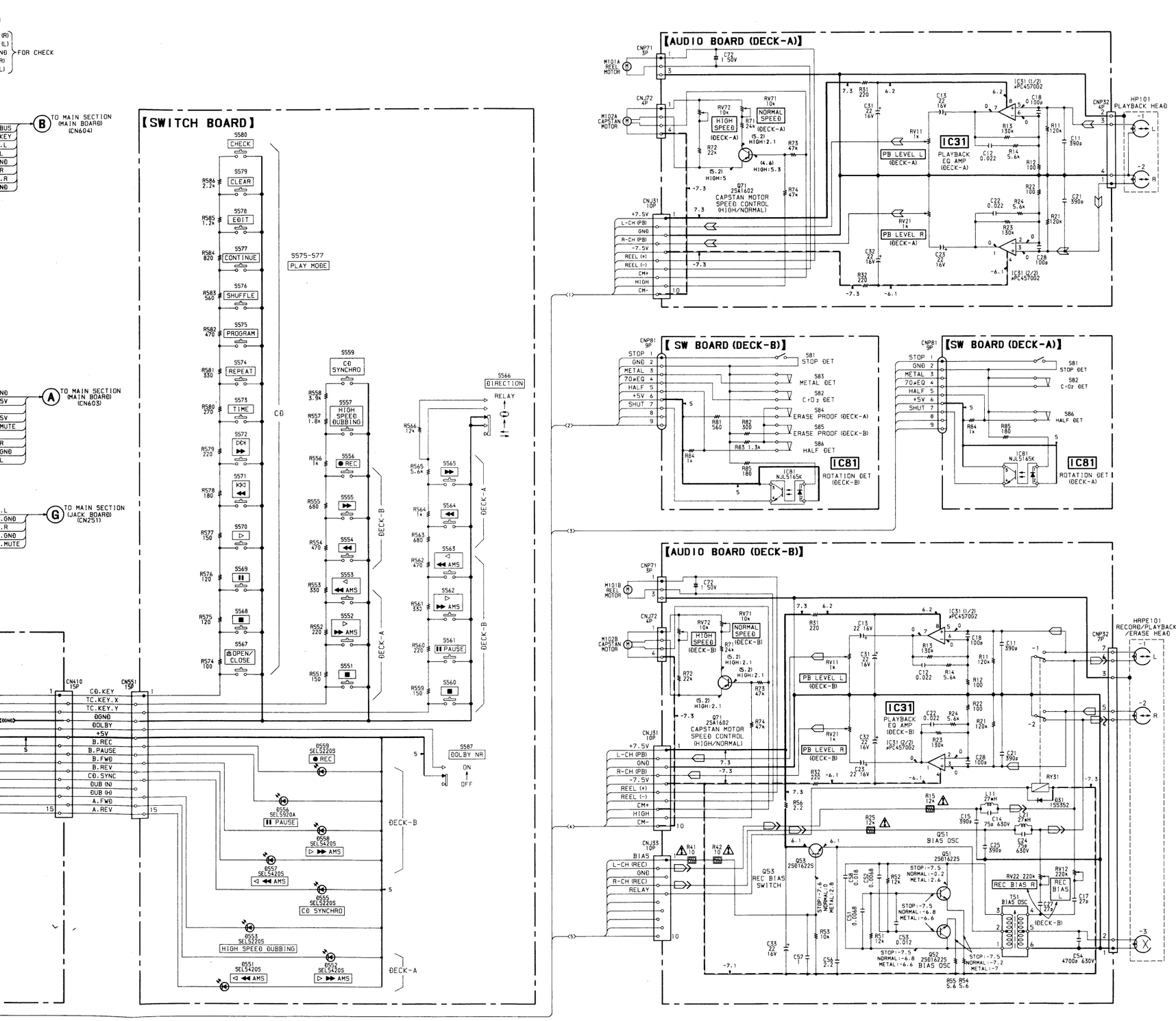
CN405 9P — STOP, GND, NC, 70μEQ, HALF, +5V, SHUT

CN406 9P — STOP, GND, METAL, 70μEQ, HALF, +5V, SHUT

CN410 15P — CO.KEY, TC.KEY.X, TC.KEY.Y, ØGND, ØDLBY, +5V, B.REC, B.PAUSE, B.FWD, B.REV, CO.SYNC, DUB (N), DUB (H), A.FWD, A.REV

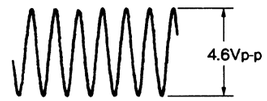
CN551 15P

CN401 7P (TEST MODE)



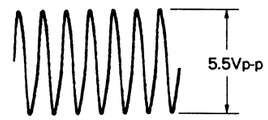

## • WAVEFORMS

**25**




IC401 (26)

**26**




IC401 (27)

**Note on Schematic Diagram:**

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬▬ : B + Line.
- ▬ ▬ : B − Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark :STOP
  ( ) :REC
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : FM
  ⇨ : PB (DECK A)
  ⇨ : PB (DECK B)
  ⇨ : REC (DECK B)

## 3-10. PRINTED WIRING BOARDS (DISPLAY SECTION)

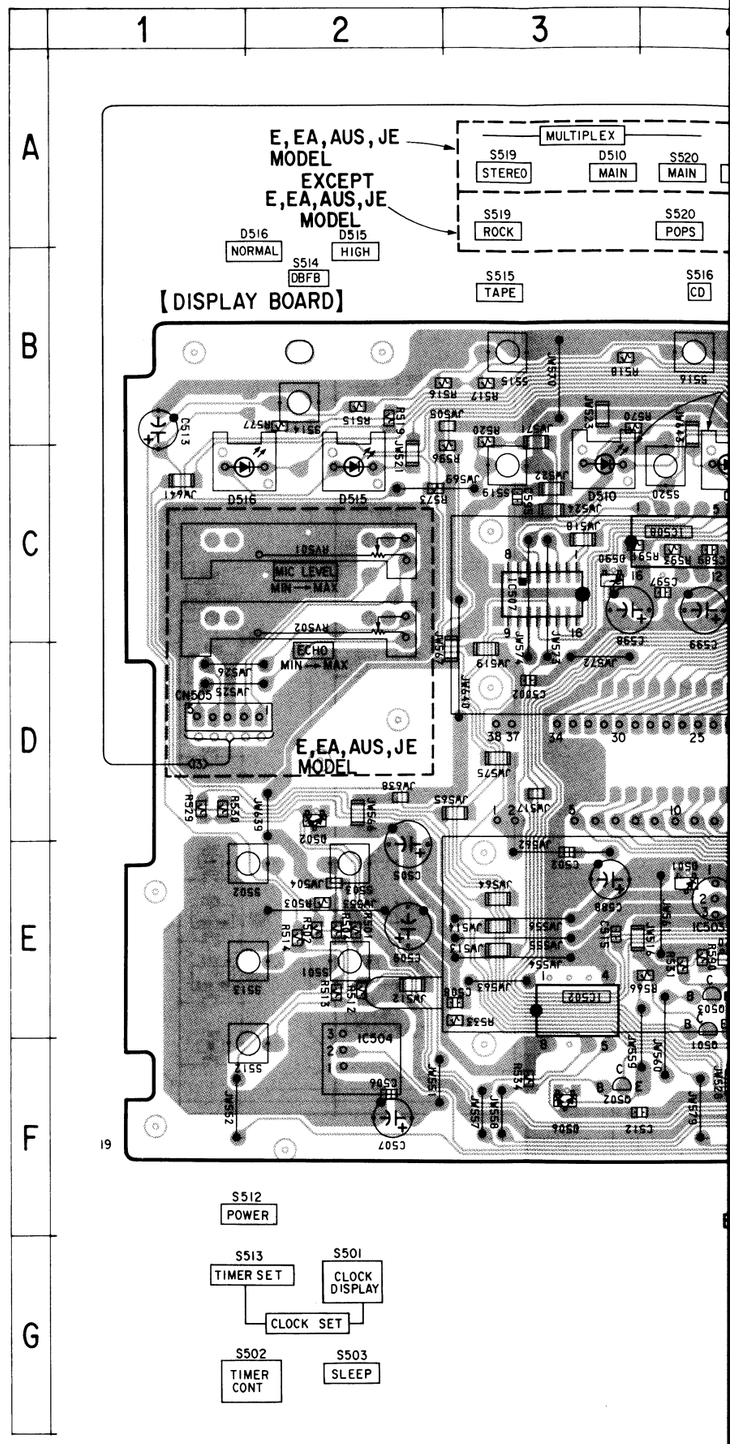
- **See page 6 for semiconductor lead layouts and 8 for circuit boards location.**

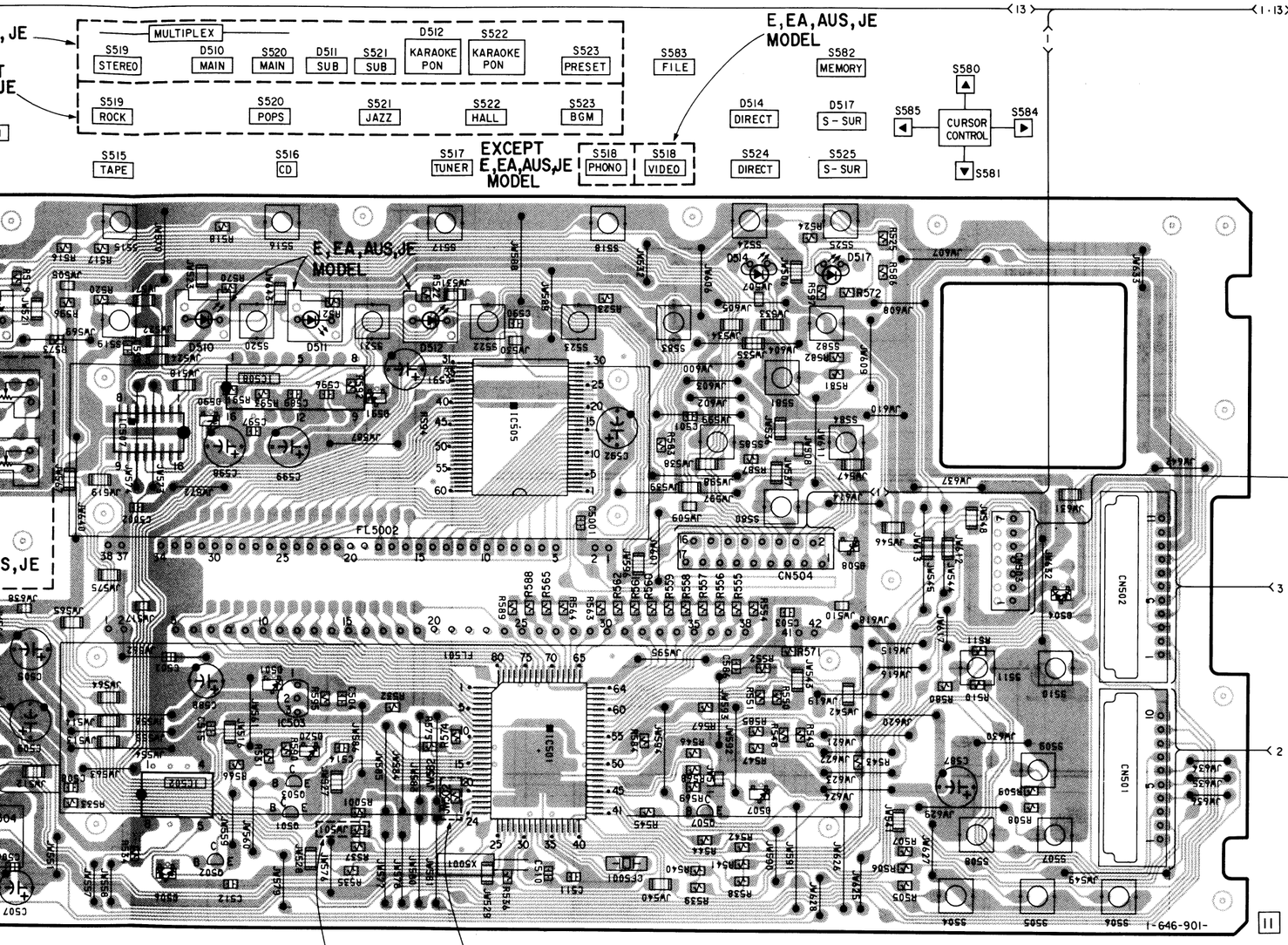
- **Semiconductor Location (DISPLAY SECTION)**

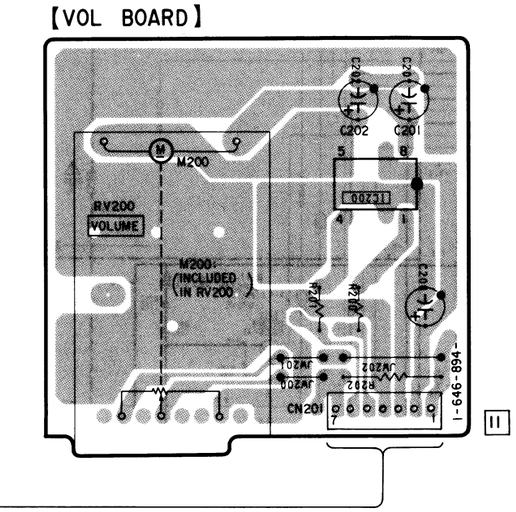
| Ref. No. | Location |
|---|---|
| D501 | E-4 |
| D502 | D-2 |
| D504 | D-8 |
| D506 | F-3 |
| D507 | E-7 |
| D508 | D-7 |
| D510 | C-3 |
| (E, EA, AUS, JE) | |
| D511 | C-4 |
| D512 | C-5 |
| D514 | B-7 |
| D515 | C-2 |
| D516 | C-1 |
| D517 | B-7 |
| D520 | E-4 |
| D590 | C-3 |
| D591 | C-4 |
| IC200 | C-12 |
| IC501 | E-5 |
| IC502 | E-3 |
| IC503 | E-4 |
| IC504 | F-2 |
| IC505 | C-5 |
| IC507 | C-3 |
| IC508 | C-4 |
| Q501 | E-4 |
| Q502 | F-3 |
| Q503 | E-4 |
| Q507 | E-6 |

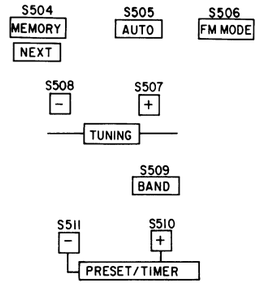
**Note on Printed Wiring Board:**

- ○——— : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- ▨ : Pattern from the side which enables seeing.
- EE : East European
- G : German
- IT : Italian
- EA : Saudi Arabia
- AUS : Australian
- JE : Tourist

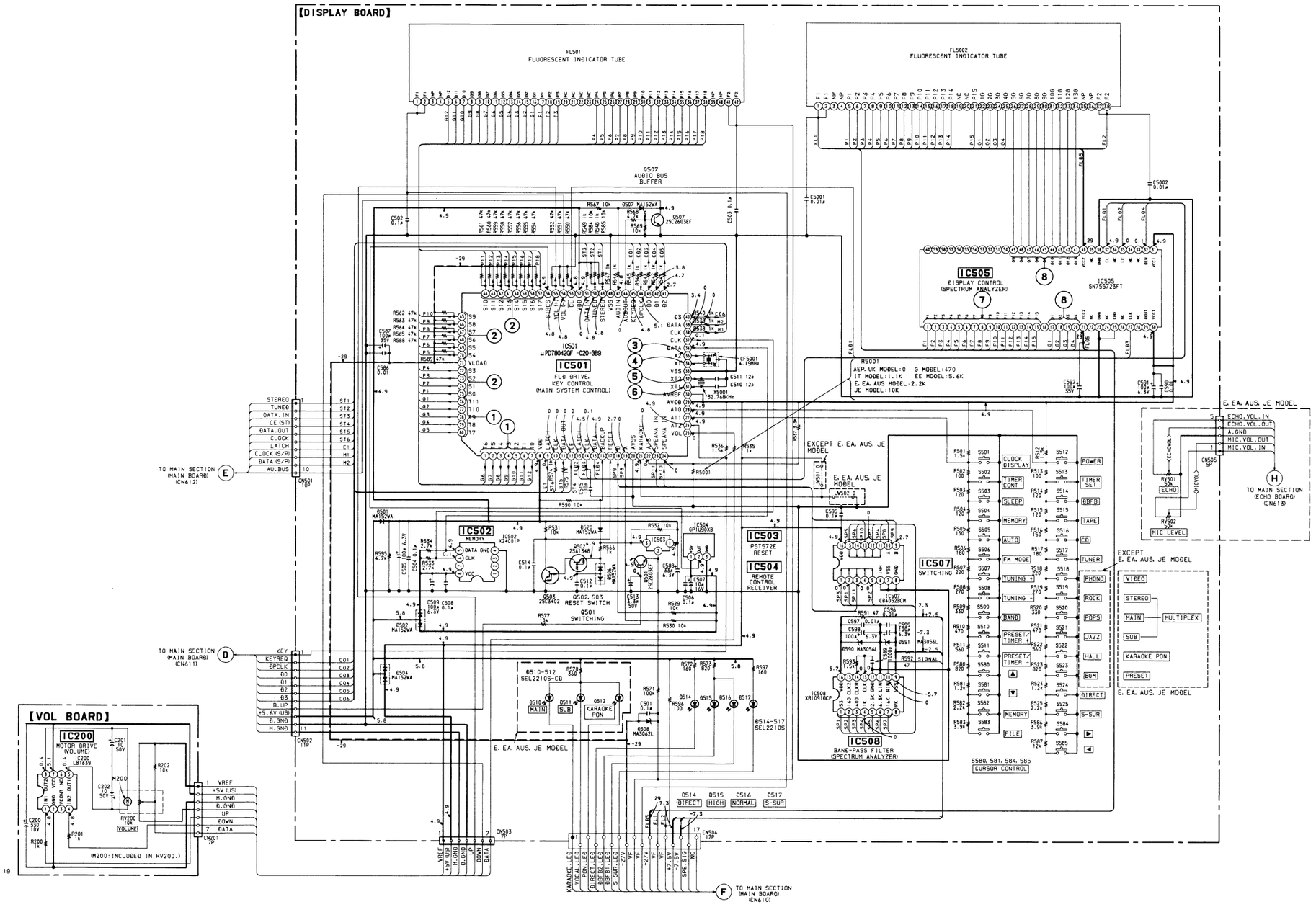




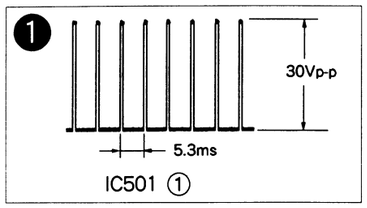



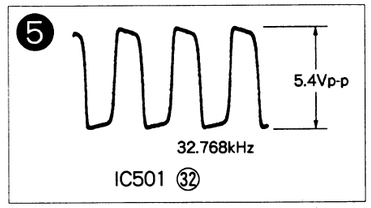



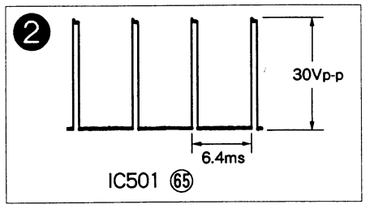

13 → 1-13 → 1-3-13 → 1-3 → D To MAIN SECTION MAIN BOARD (CN610-612)
13 → B To MAIN SECTION ECHO BOARD (CN613)
E,EA,AUS,JE MODEL

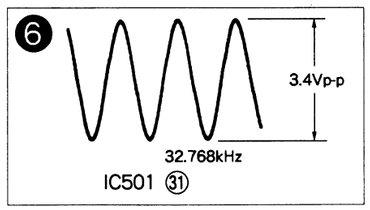

【DISPLAY BOARD】
FL501
FLUORESCENT INDICATOR TUBE
FL5002
FLUORESCENT INDICATOR TUBE
Q507
AUDIO BUS BUFFER
IC501
μPD780420F-020-3B9
FLO DRIVE, KEY CONTROL (MAIN SYSTEM CONTROL)
IC505
DISPLAY CONTROL (SPECTRUM ANALYZER)
IC505 SN75573FT
R5001
AEP, UK MODEL: 0 G MODEL: 470
IT MODEL: 1.1K EE MODEL: 5.6K
E, EA AUS MODEL: 2.2K
JE MODEL: 10K
IC502
MEMORY
IC503
PST572E
RESET
IC504
REMOTE CONTROL RECEIVER
IC507
SWITCHING
IC508
BAND-PASS FILTER (SPECTRUM ANALYZER)
IC506
SEL2210S-CO
SEL2210S
Q501
SWITCHING
Q502, 503
RESET SWITCH
Q505
2SC5402
EXCEPT E. EA. AUS. JE MODEL
E. EA. AUS. JE MODEL
TO MAIN SECTION (MAIN BOARD) (CN611)
TO MAIN SECTION (MAIN BOARD) (CN612)
TO MAIN SECTION (ECHO BOARD) (CN613)
TO MAIN SECTION (MAIN BOARD) (CN610)
【VOL BOARD】
IC200
MOTOR DRIVE (VOLUME)
M200
(M200: INCLUDED IN RV200.)
CLOCK DISPLAY
TIMER CONT
SLEEP
MEMORY
AUTO
FM MODE
TUNING
BAND
PRESET/TIMER +
PRESET/TIMER -
FILE
POWER
TIMER SET
DBFB
TAPE
CD
TUNER
PHONO
ROCK
POPS
JAZZ
HALL
BGM
DIRECT
S-SUR
VIDEO
STEREO
MAIN
SUB
MULTIPLEX
KARAOKE PON
PRESET
ECHO VOL. IN
ECHO VOL. OUT
A.GND
MIC VOL. OUT
MIC VOL. IN
ECHO
MIC LEVEL
KEY
KEYREQ
BPCLK
D0
D1
D2
D3
B.UP
+5.6V (US)
D.GND
M.GND
STEREO
TUNED
DATA. IN
CE (ST)
DATA. OUT
CLOCK
LATCH
CLOCK (S/P)
DATA (S/P)
AU. BUS
VREF
+5V (US)
M.GND
D.GND
UP
DOWN
DATA
5580, 581, 584, 585
CURSOR CONTROL

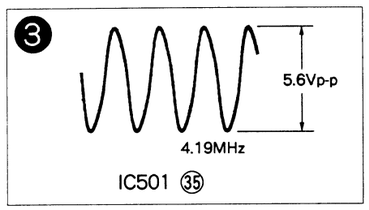
## • WAVEFORMS

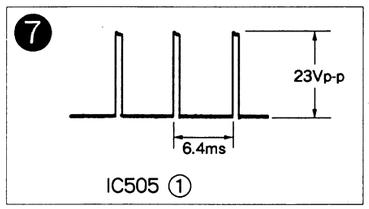


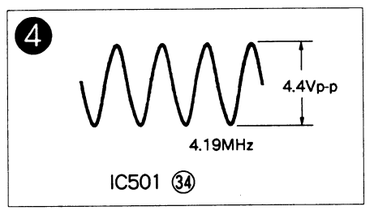



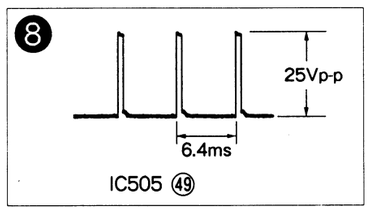



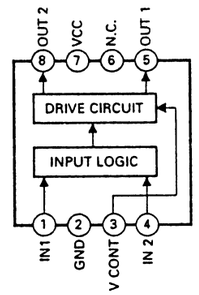

**Note on Schematic Diagram:**

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- ▬▬ : B + Line.
- ▬ ▬ ▬ : B − Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark :STOP
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- EE : East European
- G : German
- IT : Italian
- EA : Saudi Arabia
- AUS : Australian
- JE : Tourist

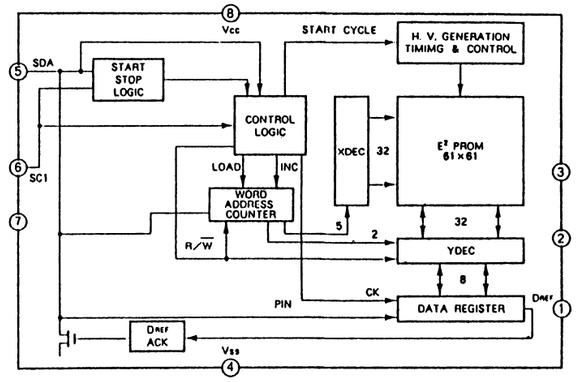


## 3-12. IC BLOCK DIAGRAM (DISPLAY SECTION)

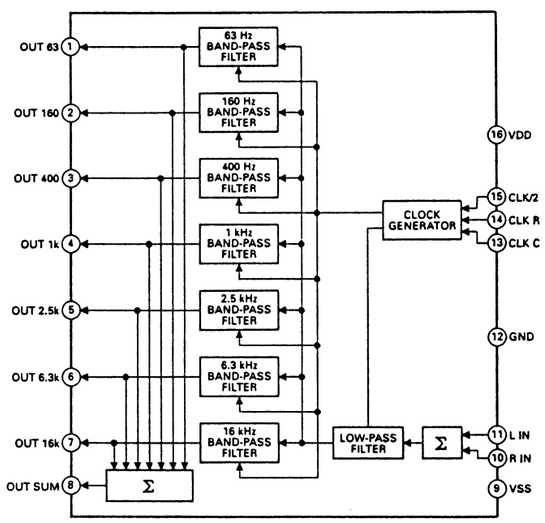
### IC200 LB1639



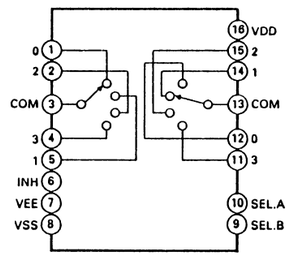

### IC502 X24C01P




### IC508 XR1091DCP

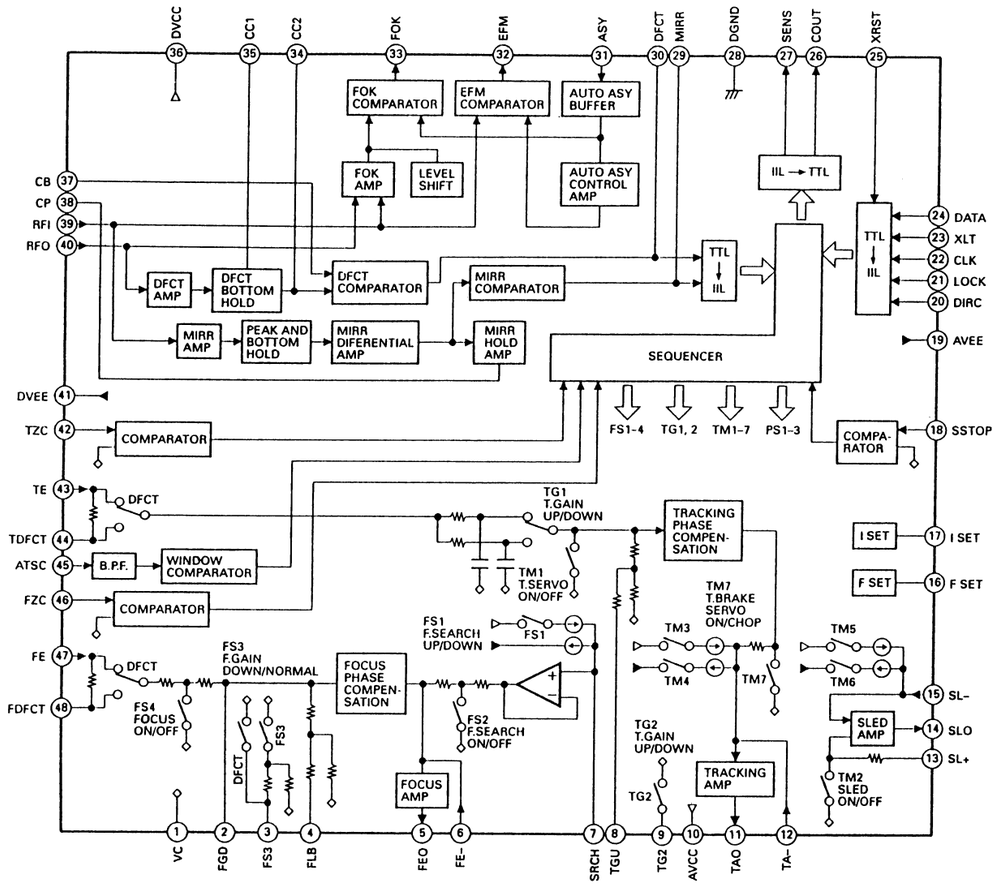



### IC507 CD4052BCM

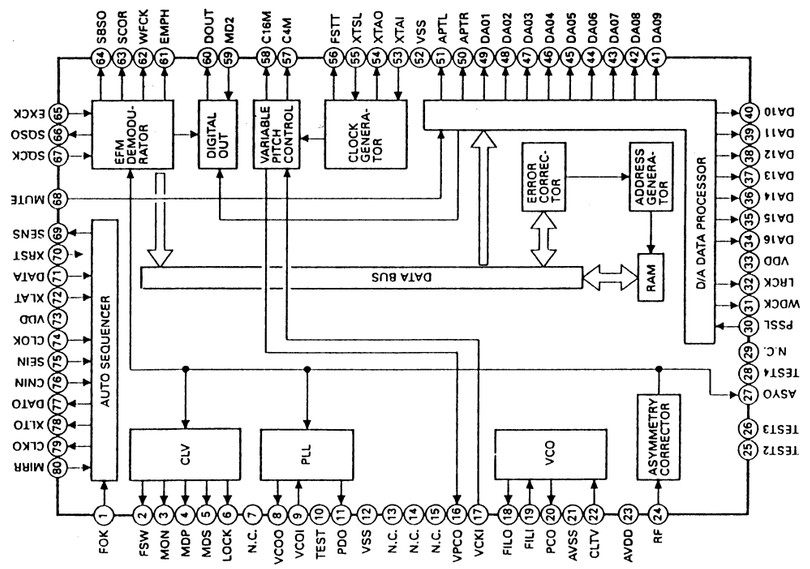


## 3-13. IC BLOCK DIAGRAM (CD SECTION)

### IC101 CXA1372AQ

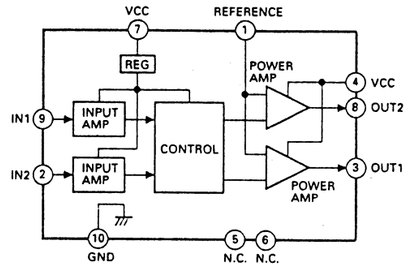



### IC201 CXD2500BQ

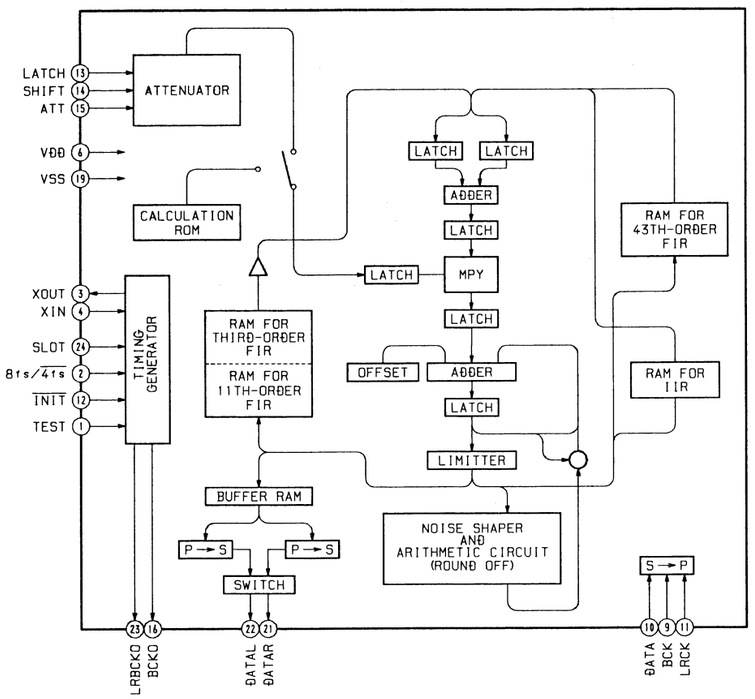





### IC103 M54641FP




### IC203 MSM6538-01GS-VKR1



## 3-14. PRINTED WIRING BOARDS (CD SECTION)

- **See page 6 for semiconductor lead layouts and 8 for circuit boards location.**

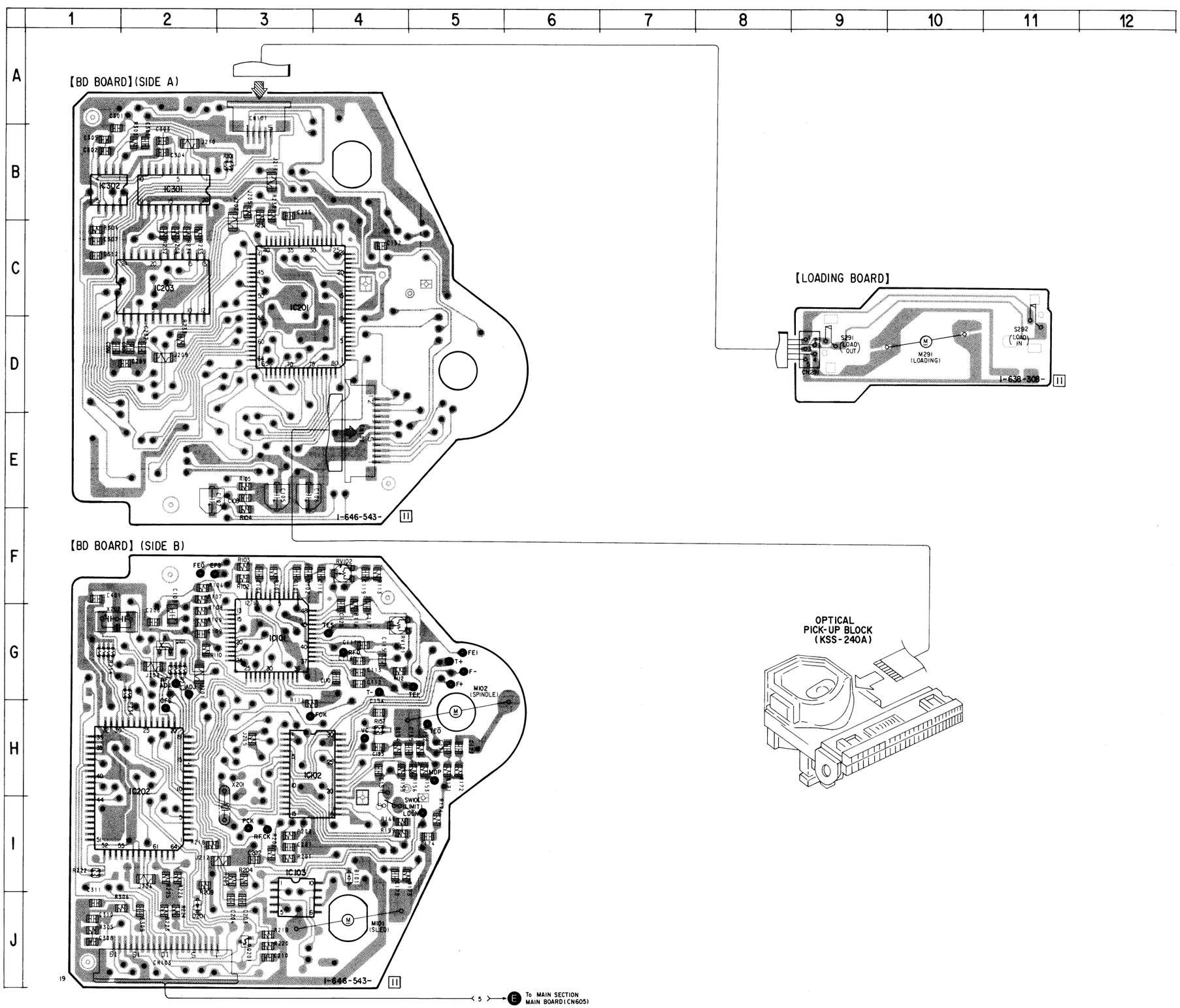
- **Semiconductor Location (CD SECTION)**

| Ref. No. | Location |
|---|---|
| D101 | I-4 |
| D201 | J-2 |
| | |
| IC101 | G-3 |
| IC102 | H-3 |
| IC103 | J-3 |
| IC201 | C-3 |
| IC202 | H-2 |
| IC203 | C-2 |
| IC301 | B-2 |
| IC302 | B-1 |
| | |
| Q101 | G-2 |
| Q201 | J-3 |

**Note on Printed Wiring Board:**

- ○——— : parts extracted from the component side.
- ● : Through hole.
- ▒▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)



OPTICAL PICK UP BLOCK KSS-240A ⚠

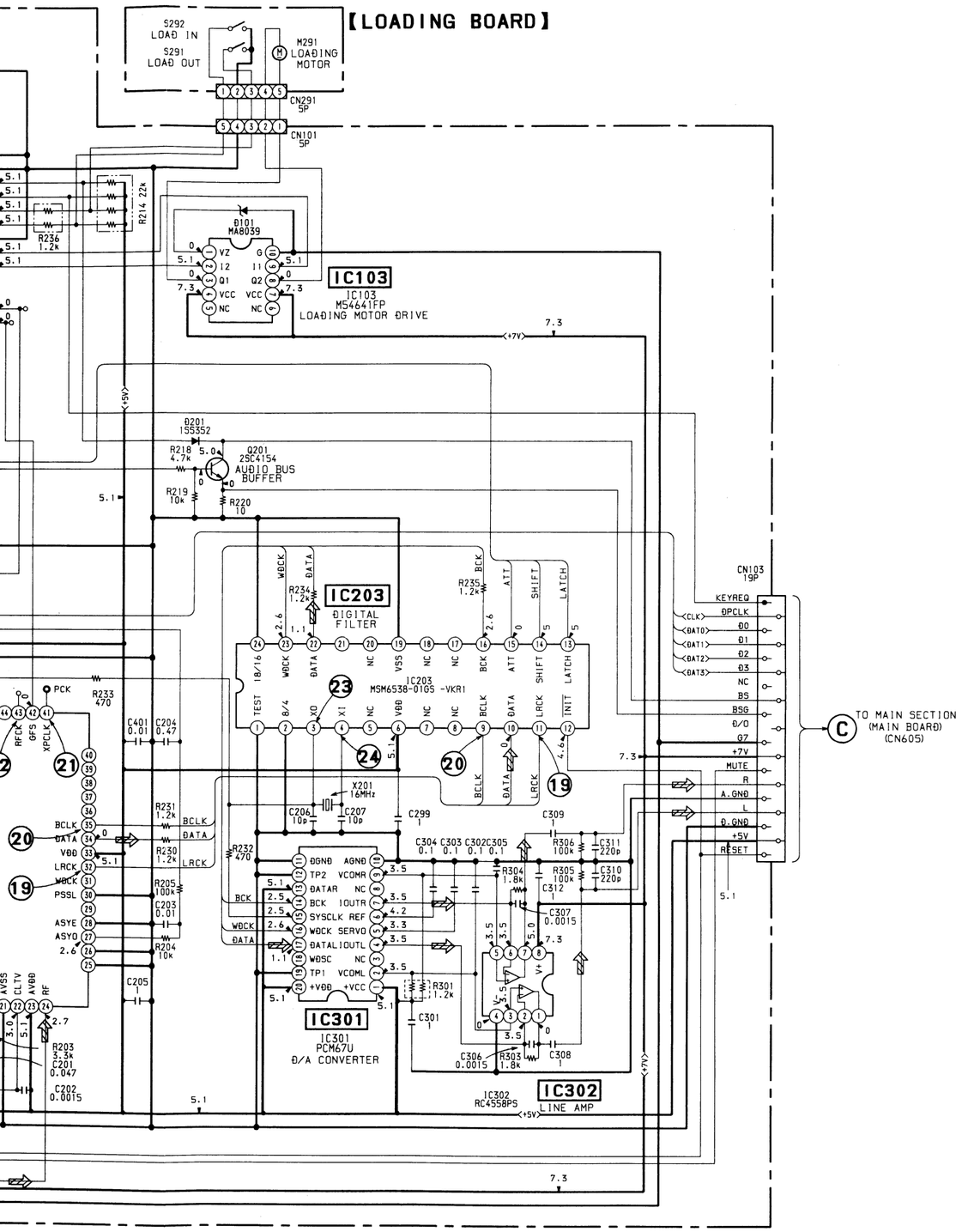
【BD BOARD】

IC102
IC102
LA6525M
FOCUS/TRACKING COIL ÐRIVE
SPINÐLE/SLEÐ MOTOR ÐRIVE

IC101
IC101
CXA1372AQ
FOCUS/TRACKING
/SLEÐ SERVO
EFM COMPARATOR

IC202
IC202
#PÐ75116GF-F21 -3BE
CÐ SECTION
SYSTEM CONTROL

IC201
IC201
CXÐ2500BQ
ÐIGITAL SIGNAL PROCESSOR,
CLV SERVO




## • WAVEFORMS

**13** 1.5Vp-p
IC101 (40) PLAY

**17** 6Vp-p, 4MHz
IC202 (9)

**21** 5.5Vp-p, 230nsec
IC201 (41) PLAY

**14** 2.5V, APPROX 500mVp-p
IC101 (43) PLAY

**18** 2.2Vp-p, 7.5 µsec
IC201 (4) PLAY

**22** 5.2V, 136 µsec
IC201 (43)

**15** 2.5V, APPROX 100mVp-p
IC101 (47) PLAY

**19** 5.0Vp-p, 22.7 µsec
IC203 (11)

**23** 5Vp-p, 16MHz
IC203 (3)

**16** 5Vp-p, 4MHz
IC202 (8)

**20** 5.5Vp-p, 470nsec
IC203 (10)

**24** 5Vp-p, 16MHz
IC203 (4)

**Note on Schematic Diagram:**

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.

**Note:** The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬▬ : B + Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark :PLAY
- Voltages are taken with a VOM (10 MΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD

# SECTION 4
# EXPLODED VIEWS

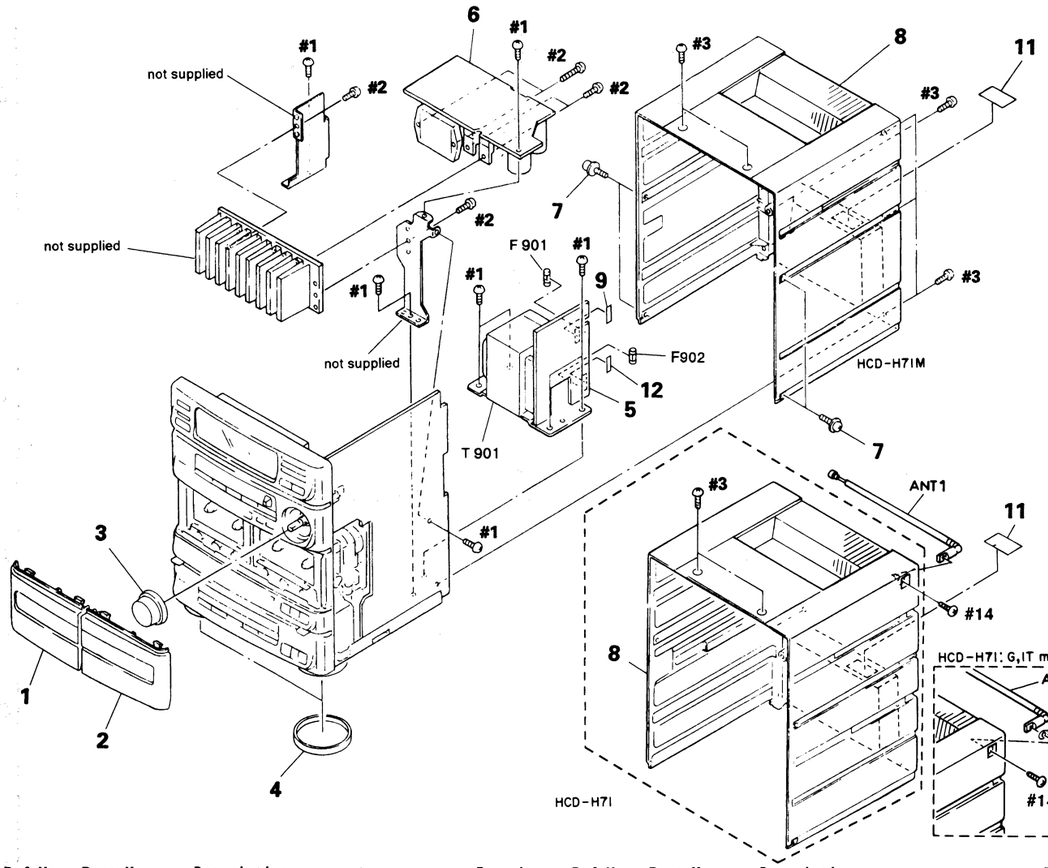
NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB,BALANCE(WHITE)...(RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware(# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- EE : East European
- G : German
- IT : Italian
- EA : Saudi Arabia
- AUS : Australian
- JE : Tourist

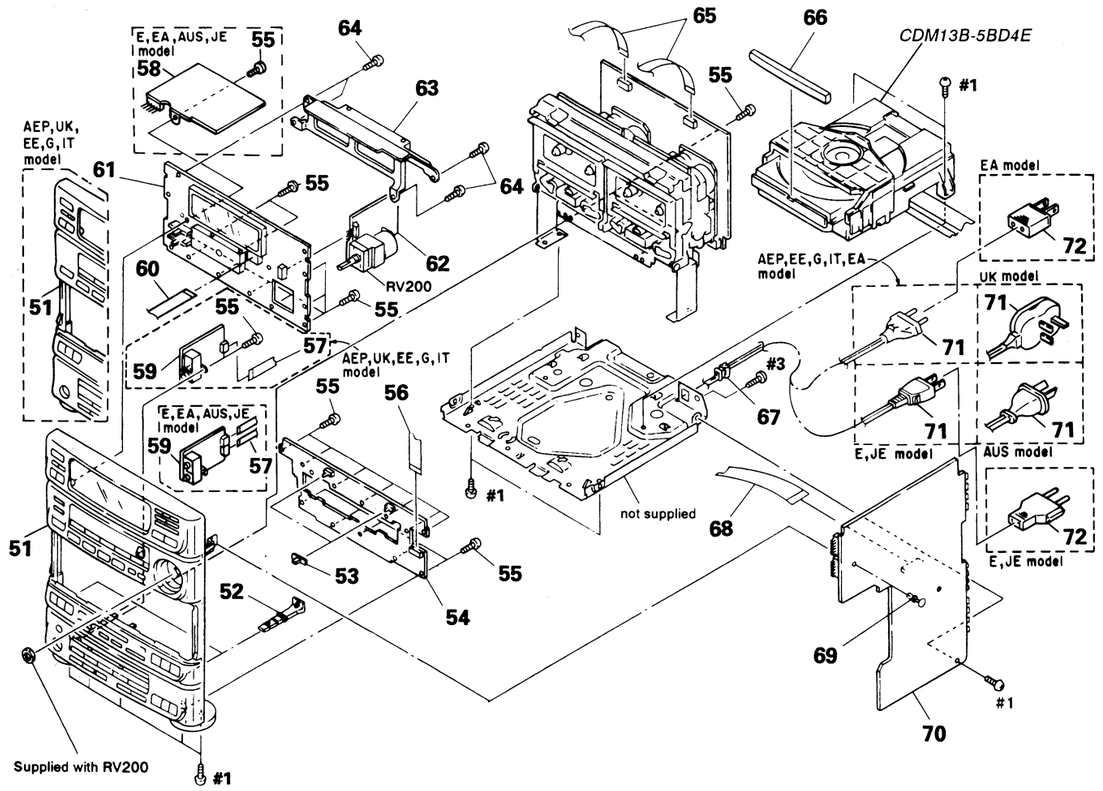
## 4-1. CASE, POWER SECTION




| Ref.No. | Part No. | Description | Remarks |
|---|---|---|---|
| 1 | X-4943-321-1 | LID (A) ASSY, CASSETTE (EXCEPT JE) | |
| 1 | X-4943-663-1 | LID (A) ASSY, CASSETTE (JE) | |
| 2 | X-4943-322-1 | LID (BKE) ASSY, CASSETTE (E, EA, AUS) | |
| 2 | X-4943-323-1 | LID (BAE) ASSY, CASSETTE (H71:AEP, EE, G, IT) | |
| 2 | X-4943-327-1 | LID (BMAE) ASSY, CASSETTE (H71M) | |
| 2 | X-4943-664-1 | LID (BKE) ASSY, CASSETTE (JE) | |
| 3 | 4-956-480-01 | KNOB (VOLUME) | |
| 4 | 4-936-827-12 | ORNAMENT (FOOT) | |
| * 5 | 1-646-898-11 | POWER SUPPLY BOARD | |
| * 6 | A-4356-864-A | POWER AMP BOARD, COMPLETE (E, EA, AUS, JE) | |
| * 6 | A-4356-865-A | POWER AMP BOARD, COMPLETE (AEP, UK, EE) | |
| * 6 | A-4356-866-A | POWER AMP BOARD, COMPLETE (G, IT) | |
| 7 | 3-704-366-01 | SCREW (CASE) (M3X8) | |
| * 8 | 4-956-470-11 | CASE (H71:AEP, EE, G, IT) | |
| * 8 | 4-956-499-01 | CASE (H71M) | |
| 8 | X-4943-266-1 | CASE ASSY (E, EA, JE) | |
| 8 | X-4943-269-1 | CASE ASSY (AUS) | |
| 8 | X-4943-270-1 | CASE ASSY (H71:AEP, EE, G, IT) | |
| 9 | 3-701-947-14 | LABEL (T2A), FUSE (E, EA, AUS) | |
| 10 | 1-501-594-21 | ANTENNA (FM) (G, IT) | |
| * 11 | 4-941-548-01 | LABEL, CLASS 1 | |
| 12 | 3-701-947-12 | LABEL (T1.25A), FUSE | |
| ANT1 | 1-501-321-51 | ANTENNA, TELESCOPIC (H71) | |
| ⚠F901 | 1-532-285-00 | FUSE (T1.25A 250V) | |
| ⚠F902 | 1-532-203-00 | FUSE (T2A 250V) (E, EA, JE) | |
| ⚠T901 | 1-423-471-11 | TRANSFORMER, POWER (AEP, EE, G, IT) | |
| ⚠T901 | 1-423-472-11 | TRANSFORMER, POWER (AUS, UK) | |
| ⚠T901 | 1-423-473-11 | TRANSFORMER, POWER (E, EA, JE) | |



## 4-2. FRONT PANEL SECTION

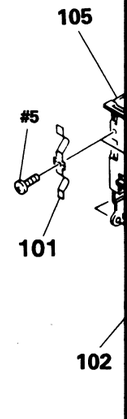



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

| Ref.No. | Part No. | Description | Remarks |
|---|---|---|---|
| 51 | X-4943-315-1 | PANEL ASSY, FRONT (E, EA, AUS, JE) | |
| 51 | X-4943-316-1 | PANEL ASSY, FRONT (AEP, UK, EE, G, IT) | |
| 52 | 4-956-477-01 | BUTTON (TC), EJECT | |
| 53 | 4-956-476-01 | KNOB (DIRECTION/DOLBY) | |
| * 54 | A-4356-879-A | SWITCH BOARD, COMPLETE | |
| 55 | 4-951-620-01 | SCREW (2.6X8), +BVTP | |
| 56 | 1-696-922-11 | WIRE (FLAT TYPE) (15 CORE) | |
| 57 | 1-696-923-11 | WIRE (FLAT TYPE) (5 CORE) | |
| * 58 | A-4356-880-A | ECHO BOARD, COMPLETE (E, EA, AUS, JE) | |
| * 59 | 1-646-897-11 | JACK BOARD | |
| 60 | 1-690-102-11 | WIRE (FLAT TYPE) (17 CORE) | |
| * 61 | A-4356-872-A | DISPLAY BOARD, COMPLETE (E, EA, AUS) | |
| * 61 | A-4356-873-A | DISPLAY BOARD, COMPLETE (AEP, UK) | |
| * 61 | A-4356-874-A | DISPLAY BOARD, COMPLETE (IT) | |
| * 61 | A-4356-875-A | DISPLAY BOARD, COMPLETE (G) | |
| * 61 | A-4356-876-A | DISPLAY BOARD, COMPLETE (EE) | |
| * 61 | A-4360-447-A | DISPLAY BOARD, COMPLETE (JE) | |
| * 62 | 1-646-894-11 | VOL BOARD | |
| * 63 | 4-956-469-01 | BRACKET (CASE) | |
| 64 | 4-951-620-11 | SCREW (2.6X10), +BVTP | |
| 65 | 1-690-588-31 | WIRE (FLAT TYPE) (9 CORE) | |
| 66 | 4-956-474-01 | PANEL, LOADING | |
| * 67 | 3-703-244-00 | BUSHING (2104), CORD (EXCEPT E, JE) | |
| * 67 | 3-703-571-11 | BUSHING (S) (4516), CORD (E, JE) | |
| 68 | 1-696-921-11 | WIRE (FLAT TYPE) (19 CORE) | |
| 69 | 4-812-134-00 | RIVET NYLON, 3.5 | |
| * 70 | A-4356-859-A | MAIN BOARD, COMPLETE (E, EA, AUS) | |
| * 70 | A-4356-860-A | MAIN BOARD, COMPLETE (H71:AEP) | |
| * 70 | A-4356-861-A | MAIN BOARD, COMPLETE (G, IT) | |
| * 70 | A-4356-862-A | MAIN BOARD, COMPLETE (EE) | |
| * 70 | A-4356-863-A | MAIN BOARD, COMPLETE (JE) | |
| * 70 | A-4356-885-A | MAIN BOARD, COMPLETE (H71M) | |
| ⚠71 | 1-574-902-11 | CORD, POWER (E, JE) | |
| ⚠71 | 1-590-042-11 | CORD, POWER (WITH CORE) (G, IT) | |
| ⚠71 | 1-590-083-11 | CORD, POWER (AUS) | |
| ⚠71 | 1-696-169-11 | CORD, POWER (AEP, EE, EA) | |
| ⚠71 | 1-696-570-21 | CORD, POWER (UK) | |
| ⚠72 | 1-569-007-11 | ADAPTOR, CONVERSION 2P (E, JE) | |
| ⚠72 | 1-569-008-11 | ADAPTOR, CONVERSION 2P (EA) | |
| RV200 | 1-223-301-11 | RES, VAR, CARBON(WITH MOTOR)10K (VOLUME) | |



## 4-3. MECHA




| Ref.No. | Part |
|---|---|
| 101 | 3-34 |
| 102 | 3-36 |
| 103 | 3-35 |
| 104 | 3-35 |
| 105 | X-33 |
| 106 | X-33 |
| 107 | 3-36 |
| 108 | 3-35 |
| 109 | 3-35 |
| 110 | 3-36 |
| 111 | 3-35 |

-5BD4E

1

EA model

72

UK model

71

71

AUS model

72

E, JE model

#1

rk ⚠ or dotted
r safety.
specified.

Remarks

E)

XCEPT E, JE)
D (E, JE)

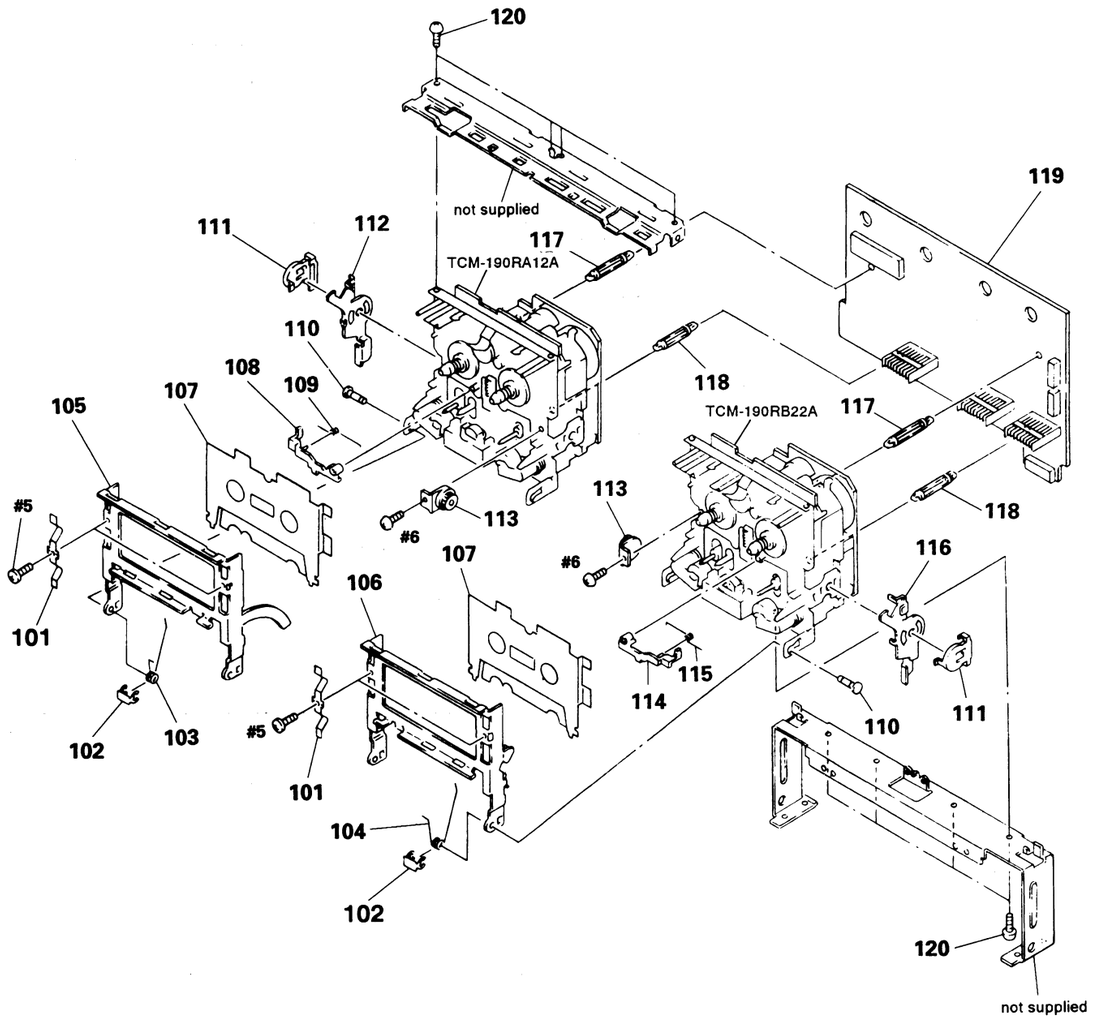
RE)

, EA, AUS)
71:AEP)
, IT)
E)
E)
71M)

(G, IT)

(E, JE)
(EA)
OTOR) 10K (VOLUME)

## 4-3. MECHANISM DECK CHASSIS SECTION

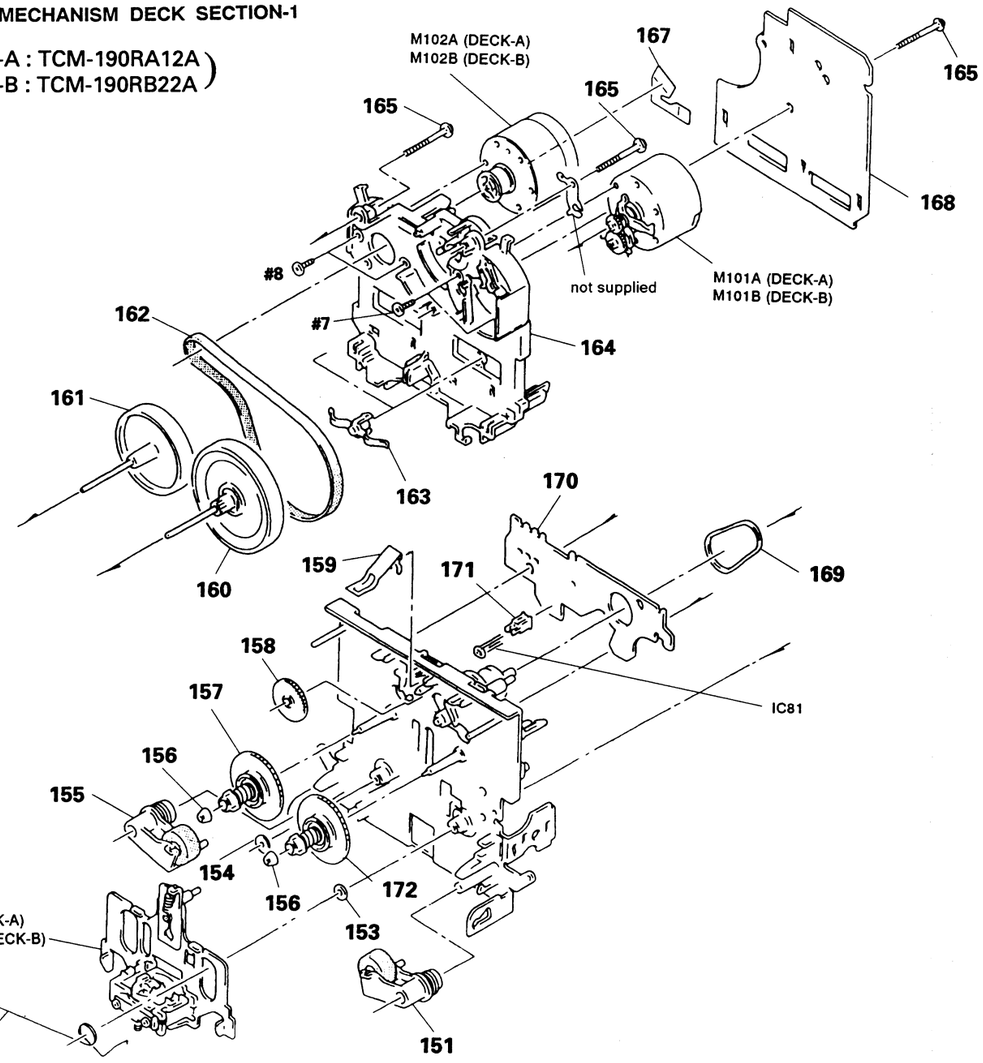



| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 101 | 3-340-137-01 | SPRING, CASSETTE RETAINER | |
| 102 | 3-367-720-01 | RING (W), RETAINING | |
| 103 | 3-354-959-01 | SPRING (LOADING L), TORSION | |
| 104 | 3-354-960-01 | SPRING (LOADING R), TORSION | |
| 105 | X-3362-857-1 | HOLDER (L) ASSY, CASSETTE | |
| 106 | X-3362-856-1 | HOLDER (R) ASSY, CASSETTE | |
| 107 | 3-367-711-01 | RETAINER, CASSETTE | |
| 108 | 3-354-955-01 | LEVER (EJ SAFTY LEVER L) | |
| 109 | 3-354-961-01 | SPRING (EJ SAFTY SPRING L) | |
| 110 | 3-367-721-01 | SHAFT (FULCRUM SHAFT) | |
| 111 | 3-354-957-01 | JOINT (LOCK LEVER) | |
| * 112 | 3-367-709-01 | LEVER (LOCK LEVER L) | |
| 113 | 3-354-963-01 | DAMPER | |
| 114 | 3-354-956-01 | LEVER (EJ SAFTY LEVER R) | |
| 115 | 3-354-962-01 | SPRING (EJ SAFTY SPRING R) | |
| * 116 | 3-367-710-01 | LEVER (LOCK LEVER R) | |
| * 117 | 3-682-419-31 | HOLDER, P.C.B | |
| * 118 | 3-682-419-21 | HOLDER, P.C.B | |
| * 119 | A-4356-877-A | TC BOARD, COMPLETE (EXCEPT G, IT) | |
| * 119 | A-4356-878-A | TC BOARD, COMPLETE (G, IT) | |
| 120 | 4-928-635-01 | SCREW, +BV (2.6X8) TAPPING | |



## 4-4. TAPE MECHANISM DECK SECTION-1

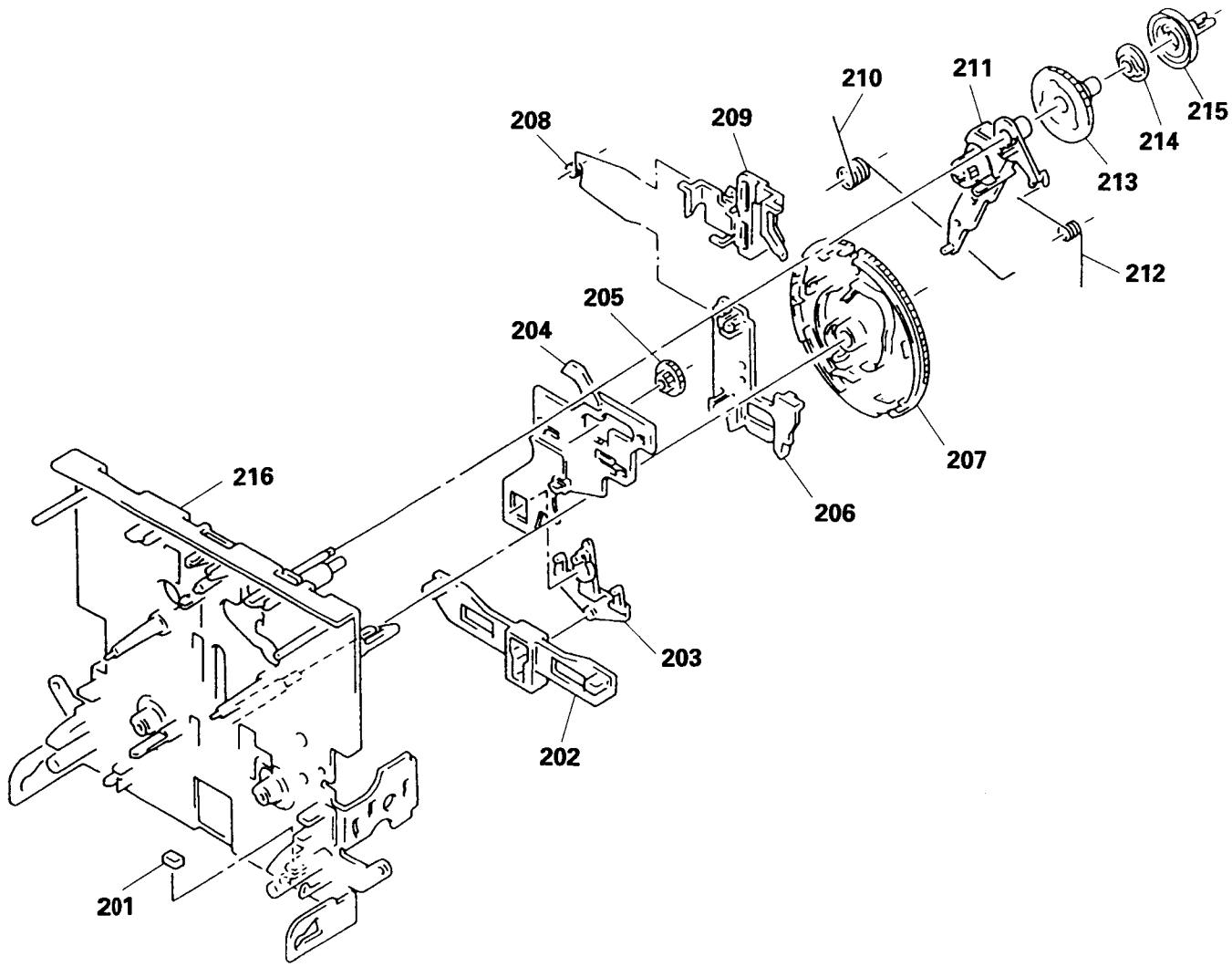
(DECK-A : TCM-190RA12A
DECK-B : TCM-190RB22A)




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 151 | X-3359-408-1 | LEVER (PINCH LEVER FWD) ASSY | |
| 152 | 3-359-455-01 | SPRING, TORSION | |
| 153 | 3-356-713-01 | WASHER | |
| 154 | 3-356-714-01 | WASHER | |
| 155 | X-3359-409-1 | LEVER (PINCH LEVER REV) ASSY | |
| 156 | 3-362-308-01 | CAP (REEL) | |
| 157 | X-3362-078-1 | TABLE ASSY (B), REEL | |
| 158 | 3-359-424-01 | GEAR (REV GEAR) | |
| 159 | 3-359-430-01 | SPRING(CASSETTE RETAINER), LEAF | |
| 160 | X-3359-406-1 | FLYWHEEL (FWD) ASSY | |
| 161 | X-3359-410-1 | FLYWHEEL (REV) ASSY | |
| 162 | 3-359-417-01 | BELT (FLAT), CAPSTAN | |
| 163 | 3-575-321-00 | RETAINER, THRUST, CAPSTAN | |
| * 164 | 3-359-436-01 | BASE (THRUST RETAINER), FITTING | |
| 165 | 3-359-414-01 | SCREW (+PTPWH 2X23) | |
| 167 | 1-638-983-11 | PC BOARD, MOTOR FLEXIBLE | |
| * 168 | A-2006-399-A | MOUNTED PCB (RA12A), AUDIO (DECK-A) | |
| * 168 | A-2006-400-A | MOUNTED PCB (RB22A), AUDIO (DECK-B) | |
| 169 | 3-359-466-01 | BELT (FR), SQUARE | |
| * 170 | 1-634-841-14 | SW BOARD (DECK-A) | |
| * 170 | 1-634-841-14 | SW BOARD (DECK-B) | |
| 171 | 3-343-419-01 | HOLDER (S SENSOR A) | |
| 172 | X-3359-404-1 | TABLE ASSY, REEL | |
| HP101 | A-2003-837-F | BASE ASSY, HEAD(DECK-A) | |
| HRPE101 | A-2003-838-A | DECK ASSY, HEAD(DECK-B) | |
| IC81 | 8-719-710-03 | DIODE NJL5165K-B | |
| M101A | X-3363-501-1 | MOTOR ASSY (REEL) (DECK-A) | |
| M101B | X-3363-501-1 | MOTOR ASSY (REEL) (DECK-B) | |
| M102A | X-3359-417-1 | MOTOR ASSY (CAPSTAN) (DECK-A) | |
| M102B | X-3359-417-1 | MOTOR ASSY (CAPSTAN) (DECK-B) | |

## 4-5. TAPE MECHANISM DECK SECTION-2

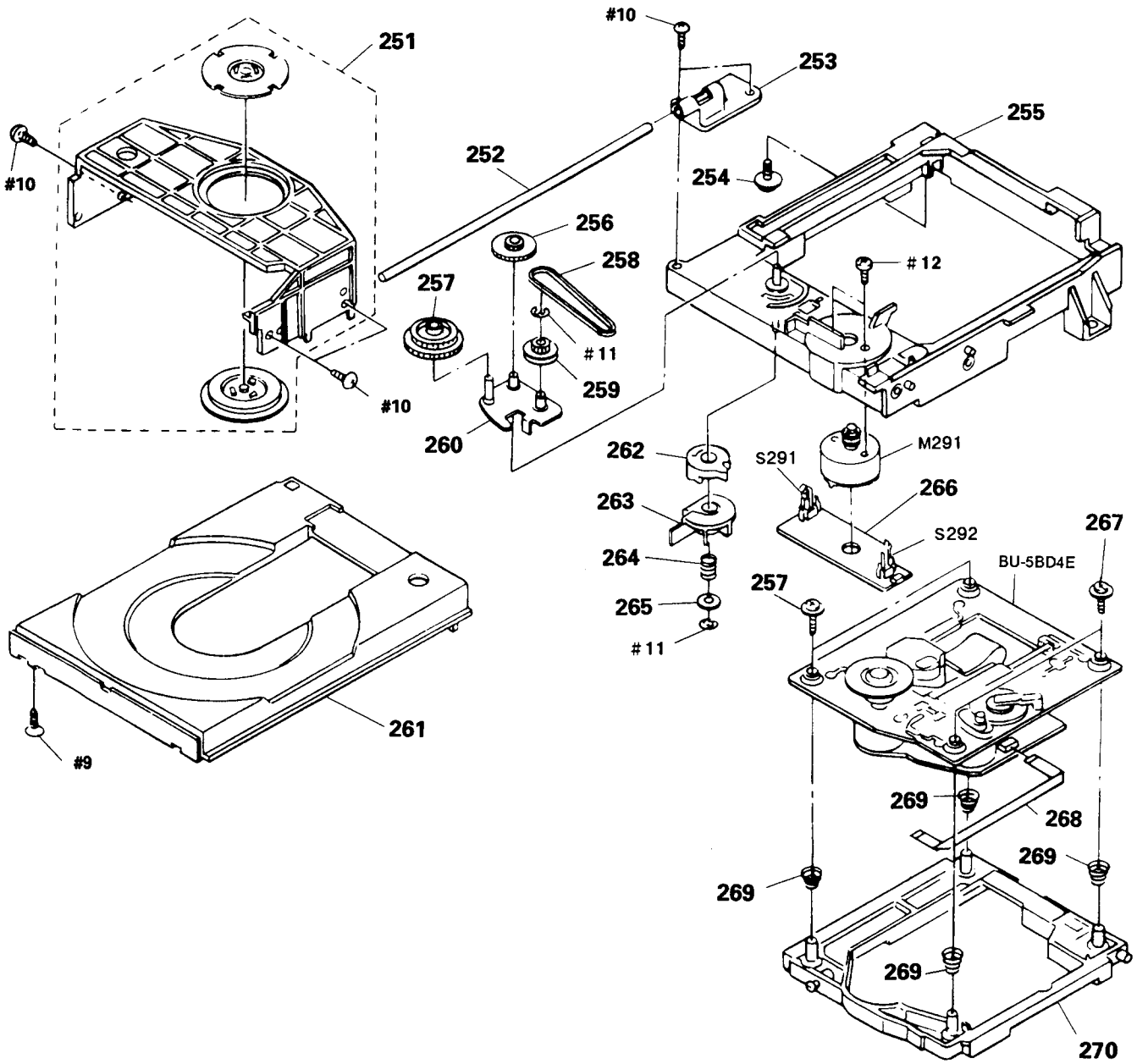
(DECK-A : TCM-190RA12A
DECK-B : TCM-190RB22A)




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 201 | 3-359-469-01 | SPACER | |
| * 202 | 3-359-425-01 | SLIDER (REVERSE SLIDER) | |
| 203 | 3-359-426-01 | LEVER (REVERSE LEVER) | |
| * 204 | 3-359-415-01 | SLIDER (TRIGGER SLIDER) | |
| 205 | 3-359-448-01 | GEAR (TRIGGER) | |
| * 206 | 3-359-427-01 | SLIDER (LEVERSE SLIDER) | |
| 207 | 3-359-420-01 | GEAR (CAM GEAR) | |
| 208 | 3-359-454-01 | SPRING, TORSION | |
| 209 | 3-359-429-01 | SLIDER (BRAKE PLATE) | |
| 210 | 3-359-456-01 | SPRING(TRIGGER SPRING), TORSION | |
| 211 | X-3359-405-1 | LEVER (FR ARM) ASSY | |
| 212 | 3-359-453-01 | SPRING (FR ARM), TORSION | |
| 213 | 3-359-419-01 | GEAR (FR GEAR) | |
| 214 | 3-359-421-01 | CLUTCH (REEL DISK) | |
| 215 | 3-359-418-01 | PULLEY (FR PULLEY) | |
| 216 | X-3363-790-1 | CHASSIS ASSY, MECHANICAL | |

## 4-6. CD MECHANISM DECK SECTION-1

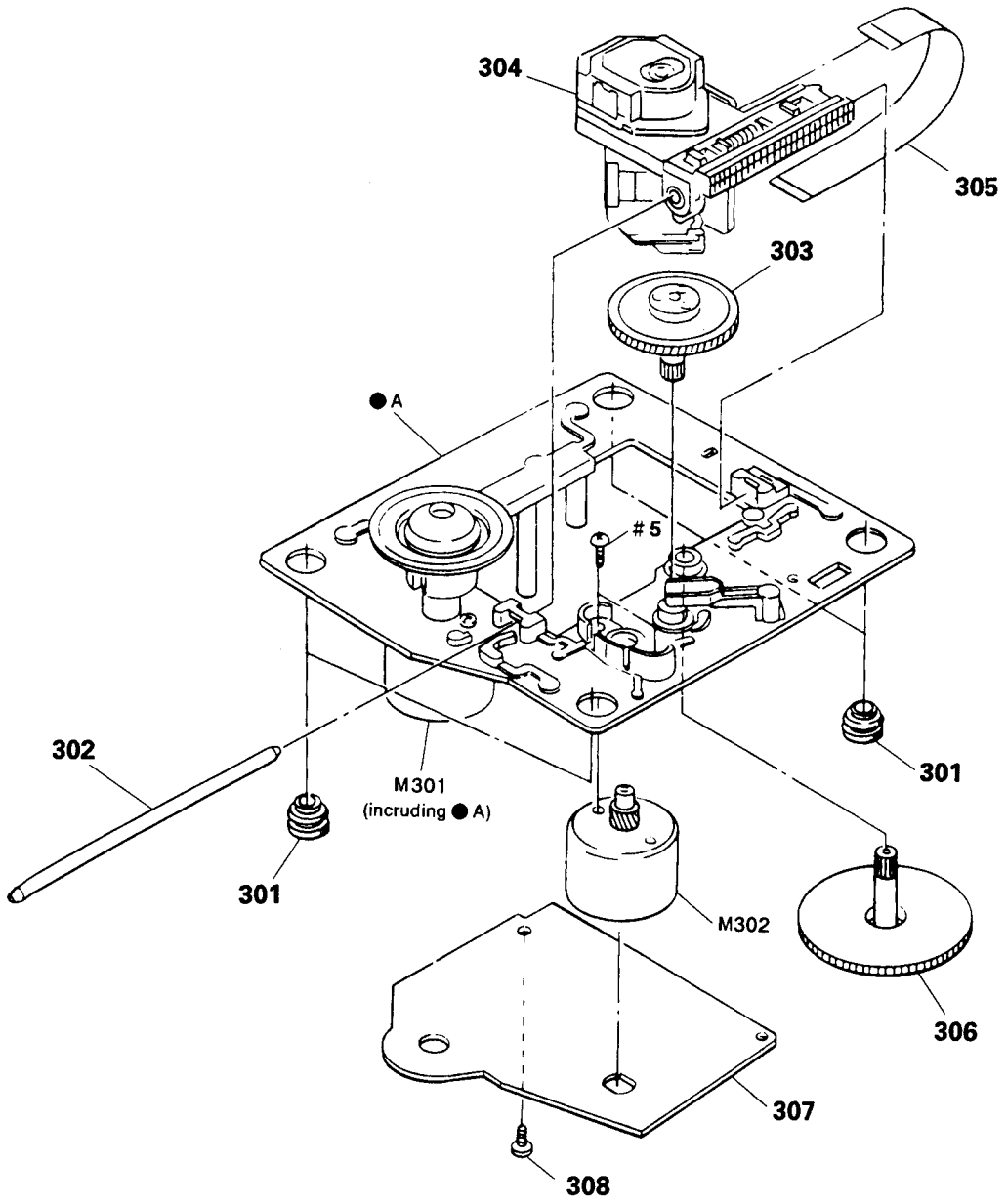
(CDM13B-5BD4E)




| Ref.No. | Part No. | Description | Remarks |
|---|---|---|---|
| 251 | A-4604-752-A | HOLDER (MG) ASSY | |
| 252 | 4-929-764-01 | SHAFT (TABLE GUIDE) | |
| 253 | 4-944-006-01 | BEARING | |
| * 254 | 4-917-583-21 | BRACKET, YOKE | |
| 255 | X-4941-462-1 | CHASSIS (MD) ASSY | |
| 256 | 4-927-628-01 | GEAR (C) | |
| 257 | 4-927-620-01 | GEAR (P) | |
| 258 | 4-927-649-01 | BELT | |
| 259 | 4-929-724-01 | PULLEY (B) | |
| 260 | X-4929-703-1 | ARM ASSY, SWING | |
| 261 | 4-944-012-01 | TABLE, DISC | |
| 262 | 4-929-727-01 | CAM (A) | |
| 263 | 4-929-729-01 | CAM (B) | |
| 264 | 3-659-338-00 | SPRING, COMPRESSION | |
| 265 | 4-927-654-01 | WASHER (LIMITER) | |
| * 266 | 1-638-308-11 | LOADING BOARD | |
| 267 | 4-933-134-01 | SCREW (+PTPWH M2.6X6) | |
| 268 | 1-590-530-11 | WIRE (FLAT TYPE) (12 CORE) | |
| 269 | 4-917-541-01 | SPRING (B) | |
| 270 | 4-929-747-01 | HOLDER (BU) | |
| M291 | A-4608-362-A | MOTOR (L) ASSY (LOADING) | |
| S291 | 1-571-924-11 | SWITCH, LEAF (LOAD OUT) | |
| S292 | 1-571-924-11 | SWITCH, LEAF (LOAD IN) | |

## 4-7. CD MECHANISM DECK SECTION-2

(BU-5BD4E)




The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 301 | 4-933-126-01 | INSULATOR (A) | |
| 302 | 4-917-565-01 | SHAFT, SLED | |
| 303 | 4-917-567-01 | GEAR (M) | |
| ⚠304 | 8-848-144-11 | OPTICAL PICK-UP BLOCK KSS-240A | |
| 305 | 1-575-001-11 | WIRE (FLAT TYPE) (12 CORE) | |
| 306 | 4-917-564-01 | GEAR (P), FLATNESS | |
| * 307 | A-4649-541-A | BD BOARD, COMPLETE | |
| 308 | 4-951-620-01 | SCREW (2.6X8), +BTP | |
| M301 | X-4917-523-3 | MOTOR ASSY (SPINDLE) | |
| M302 | X-4917-504-1 | MOTOR ASSY (SLED) | |

# SECTION 5
# ELECTRICAL PARTS LIST

**BD**

**NOTE:**

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- EE : East European
- G : German
- IT : Italian
- EA : Saudi Arabia
- AUS : Australian
- JE : Tourist

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example :
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

| Ref. No. | Part No. | Description | | Remarks |
|---|---|---|---|---|
| * | A-4649-541-A | BD (A) BOARD, COMPLETE | | |
| | | ********** | | |
| | | < CAPACITOR > | | |
| C101 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C102 | 1-163-989-11 | CERAMIC CHIP 0.033uF | 10% | 25V |
| C103 | 1-135-155-21 | TANTALUM CHIP 4.7uF | 10% | 16V |
| C104 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C105 | 1-126-607-11 | ELECT CHIP 47uF | 20% | 4V |
| C106 | 1-126-607-11 | ELECT CHIP 47uF | 20% | 4V |
| C107 | 1-126-607-11 | ELECT CHIP 47uF | 20% | 4V |
| C108 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C109 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C110 | 1-163-989-11 | CERAMIC CHIP 0.033uF | 10% | 25V |
| C111 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C112 | 1-164-232-11 | CERAMIC CHIP 0.01uF | | 50V |
| C113 | 1-164-232-11 | CERAMIC CHIP 0.01uF | | 50V |
| C114 | 1-164-695-11 | CERAMIC CHIP 0.0022uF | 5% | 50V |
| C115 | 1-164-695-11 | CERAMIC CHIP 0.0022uF | 5% | 50V |
| C117 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C118 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C119 | 1-164-695-11 | CERAMIC CHIP 0.0022uF | 5% | 50V |
| C120 | 1-163-989-11 | CERAMIC CHIP 0.033uF | 10% | 25V |
| C151 | 1-163-019-00 | CERAMIC CHIP 0.0068uF | 10% | 50V |
| C152 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C153 | 1-163-135-00 | CERAMIC CHIP 560PF | 5% | 50V |
| C154 | 1-164-695-11 | CERAMIC CHIP 0.0022uF | 5% | 50V |
| C155 | 1-163-023-00 | CERAMIC CHIP 0.015uF | 5% | 50V |
| C171 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C172 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C173 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C174 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C201 | 1-163-809-11 | CERAMIC CHIP 0.047uF | 10% | 25V |
| C202 | 1-163-145-00 | CERAMIC CHIP 0.0015uF | 5% | 50V |
| C203 | 1-164-232-11 | CERAMIC CHIP 0.01uF | | 50V |
| C204 | 1-164-005-11 | CERAMIC CHIP 0.47uF | | 25V |
| C205 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C206 | 1-163-093-00 | CERAMIC CHIP 10PF | 5% | 50V |
| C207 | 1-163-093-00 | CERAMIC CHIP 10PF | 5% | 50V |
| C208 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C209 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C210 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C299 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C301 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C302 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C303 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C304 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C305 | 1-163-038-00 | CERAMIC CHIP 0.1uF | | 25V |
| C306 | 1-163-145-00 | CERAMIC CHIP 0.0015uF | 5% | 50V |
| C307 | 1-163-145-00 | CERAMIC CHIP 0.0015uF | 5% | 50V |
| C308 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C309 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C310 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% | 50V |
| C311 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% | 50V |
| C312 | 1-164-346-11 | CERAMIC CHIP 1uF | | 16V |
| C401 | 1-164-232-11 | CERAMIC CHIP 0.01uF | | 50V |
| | | < CONNECTOR > | | |
| CN101 | 1-580-858-11 | SOCKET, CONNECTOR (SMT) 5P | | |
| CN102 | 1-580-866-11 | SOCKET, CONNECTOR (SMT) 12P | | |
| CN103 | 1-580-872-41 | SOCKET, CONNECTOR (SMT) 19P | | |
| | | < DIODE > | | |
| D101 | 8-719-422-12 | DIODE MA8039 | | |
| D201 | 8-719-016-74 | DIODE 1SS352 | | |
| | | < IC > | | |
| IC101 | 8-752-053-73 | IC CXA1372AQ | | |
| IC102 | 8-759-823-48 | IC LA6525M | | |
| IC103 | 8-759-636-20 | IC M54641FP | | |
| IC201 | 8-752-352-93 | IC CXD2500BQ | | |
| IC202 | 8-759-059-86 | IC uPD75116GF-F21-3BE | | |
| IC203 | 8-759-098-27 | IC MSM6538-01GS-VKR1 | | |
| IC301 | 8-759-155-52 | IC PCM67U-B | | |
| IC302 | 8-759-996-43 | IC RC4558PS | | |

| Ref.No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| | | < JUMPER RESISTOR > | | | | |
| J201 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| J203 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| J205 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W | |
| J206 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| J207 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| J208 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W | |
| J209 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| J210 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| J211 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| J212 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| J215 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W | |
| | | < TRANSISTOR > | | | | |
| Q101 | 8-729-805-45 | TRANSISTOR | 2SC3395 | | | |
| Q201 | 8-729-602-21 | TRANSISTOR | 2SC4154-F | | | |
| | | < RESISTOR > | | | | |
| R101 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R102 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R103 | 1-216-091-00 | METAL CHIP | 56K | 5% | 1/10W | |
| R104 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W | |
| R105 | 1-216-069-00 | METAL CHIP | 6.8K | 5% | 1/10W | |
| R106 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W | |
| R107 | 1-216-114-00 | METAL GLAZE | 510K | 5% | 1/10W | |
| R108 | 1-216-105-00 | METAL CHIP | 220K | 5% | 1/10W | |
| R109 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W | |
| R110 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R111 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R112 | 1-216-083-00 | METAL CHIP | 27K | 5% | 1/10W | |
| R113 | 1-216-071-00 | METAL CHIP | 8.2K | 5% | 1/10W | |
| R114 | 1-216-105-00 | METAL CHIP | 220K | 5% | 1/10W | |
| R152 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R153 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R154 | 1-216-085-00 | METAL CHIP | 33K | 5% | 1/10W | |
| R155 | 1-216-093-00 | METAL CHIP | 68K | 5% | 1/10W | |
| R156 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R157 | 1-236-427-11 | NETWORK, RES | 18K | | | |
| R159 | 1-216-079-00 | METAL CHIP | 18K | 5% | 1/10W | |
| R160 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W | |
| R171 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W | |
| R172 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W | |
| R173 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W | |
| R174 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W | |
| R201 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W | |
| R202 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R203 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W | |
| R204 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R205 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R209 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R212 | 1-239-039-11 | RESISTOR, NETWORK (1608) | 22K | | | |
| R214 | 1-239-039-11 | RESISTOR, NETWORK (1608) | 22K | | | |
| R218 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W | |
| R219 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R220 | 1-216-001-00 | METAL CHIP | 10 | 5% | 1/10W | |
| R222 | 1-236-427-11 | NETWORK, RES | 18K | | | |
| R223 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R224 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R225 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R226 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R230 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W | |
| R231 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W | |
| R232 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W | |
| R233 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W | |
| R234 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W | |
| R235 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W | |
| R236 | 1-236-413-11 | NETWORK, RES | 1.2K | | | |
| R301 | 1-236-413-11 | NETWORK, RES | 1.2K | | | |
| R303 | 1-216-055-00 | METAL CHIP | 1.8K | 5% | 1/10W | |
| R304 | 1-216-055-00 | METAL CHIP | 1.8K | 5% | 1/10W | |
| R305 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| R306 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W | |
| | | < VARIABLE RESISTOR > | | | | |
| RV101 | 1-241-395-11 | RES, ADJ, METAL GLAZE 10K(TRACKING GAIN) | | | | |
| RV102 | 1-241-395-11 | RES, ADJ, METAL GLAZE 10K(FOCUS GAIN) | | | | |
| | | < SWITCH > | | | | |
| SW101 | 1-572-085-11 | SWITCH, LEAF (LIMIT) | | | | |
| | | < VIBRATOR > | | | | |
| X201 | 1-567-908-11 | VIBRATOR, CRYSTAL (16MHz) | | | | |
| X202 | 1-579-216-11 | VIBRATOR, CERAMIC (4MHz) | | | | |
| ********** | | | | | | |
| * | A-4356-872-A | DISPLAY BOARD, COMPLETE (E, EA, AUS) | | | | |
| * | A-4356-873-A | DISPLAY BOARD, COMPLETE (AEP, UK) | | | | |
| * | A-4356-874-A | DISPLAY BOARD, COMPLETE (IT) | | | | |
| * | A-4356-875-A | DISPLAY BOARD, COMPLETE (G) | | | | |
| * | A-4356-876-A | DISPLAY BOARD, COMPLETE (EE) | | | | |
| * | A-4360-447-A | DISPLAY BOARD, COMPLETE (JE) | | | | |
| | | ********** | | | | |
| * | 4-932-810-11 | CUSHION (FL) | | | | |
| | 4-956-613-01 | HOLDER (G), FL | | | | |
| | | < CAPACITOR > | | | | |
| C501 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V | |
| C502 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V | |
| C503 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V | |

When indicating parts by reference number, please include the board name.

# DISPLAY

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C504 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V |
| C505 | 1-124-584-00 | ELECT | 100uF | 20% | 10V |
| C506 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V |
| C507 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C508 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V |
| C509 | 1-124-584-00 | ELECT | 100uF | 20% | 10V |
| C510 | 1-163-229-11 | CERAMIC CHIP | 12PF | 5% | 50V |
| C511 | 1-163-229-11 | CERAMIC CHIP | 12PF | 5% | 50V |
| C512 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V |
| C513 | 1-126-162-11 | ELECT | 3.3uF | 20% | 50V |
| C514 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V |
| C515 | 1-163-251-11 | CERAMIC CHIP | 100PF | 5% | 50V |
| C586 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C587 | 1-126-948-11 | ELECT | 100uF | 20% | 35V |
| C588 | 1-124-229-00 | ELECT | 33uF | 20% | 10V |
| C589 | 1-163-009-11 | CERAMIC CHIP | 0.001uF | 10% | 50V |
| C590 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C591 | 1-124-584-00 | ELECT | 100uF | 20% | 10V |
| C592 | 1-126-948-11 | ELECT | 100uF | 20% | 35V |
| C595 | 1-163-038-00 | CERAMIC CHIP | 0.1uF | | 25V |
| C596 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C597 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C598 | 1-124-584-00 | ELECT | 100uF | 20% | 10V |
| C599 | 1-124-584-00 | ELECT | 100uF | 20% | 10V |
| C5001 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | | 50V |
| C5002 | 1-163-031-11 | CERAMIC CHIP | 0.01uF | | 50V |
| | | < VIBRATOR > | | | |
| CF5001 | 1-577-359-21 | VIBRATOR, CERAMIC (4.19MHz) | | | |
| | | < CONNECTOR > | | | |
| * CN501 | 1-569-156-11 | SOCKET, CONNECTOR 10P | | | |
| * CN502 | 1-573-049-11 | SOCKET, CONNECTOR 11P | | | |
| * CN503 | 1-566-969-11 | HOUSING, CONNECTOR (PC BOARD) 7P | | | |
| CN504 | 1-691-649-11 | SOCKET, CONNECTOR 17P | | | |
| * CN505 | 1-565-042-11 | HOUSING, CONNECTOR (PC BOARD) 5P | | | (E, EA, AUS, JE) |
| | | < DIODE > | | | |
| D501 | 8-719-400-20 | DIODE | MA152WA | | |
| D502 | 8-719-400-20 | DIODE | MA152WA | | |
| D504 | 8-719-400-20 | DIODE | MA152WA | | |
| D506 | 8-719-400-20 | DIODE | MA152WA | | |
| D507 | 8-719-400-20 | DIODE | MA152WA | | |
| D508 | 8-719-400-53 | DIODE | MA3062-L | | |
| D510 | 8-719-301-37 | LED | SEL2210S-CD (MAIN) (E, EA, AUS, JE) | | |
| D511 | 8-719-301-37 | LED | SEL2210S-CD (SUB) (E, EA, AUS, JE) | | |
| D512 | 8-719-301-37 | LED | SEL2210S-CD (KARAOKE PON) (E, EA, AUS, JE) | | |
| D514 | 8-719-301-39 | LED | SEL2210S-D (DIRECT) | | |
| D515 | 8-719-301-37 | LED | SEL2210S-CD (HIGH) | | |
| D516 | 8-719-301-37 | LED | SEL2210S-CD (NORMAL) | | |
| D517 | 8-719-301-39 | LED | SEL2210S-D (S-SUR) | | |
| D520 | 8-719-400-20 | DIODE | MA152WA | | |
| D590 | 8-719-400-46 | DIODE | MA3056-L | | |
| D591 | 8-719-400-46 | DIODE | MA3056-L | | |
| | | < FLUORESCENT INDICATOR > | | | |
| FL501 | 1-517-122-11 | INDICATOR TUBE, FLUORESCENT | | | |
| FL5002 | 1-517-124-11 | INDICATOR TUBE, FLUORESCENT | | | |
| | | < IC > | | | |
| IC501 | 8-759-088-86 | IC | uPD78042GF-020-3B9 | | |
| IC502 | 8-759-500-31 | IC | X24C01P | | |
| IC503 | 8-759-520-90 | IC | PST572E | | |
| IC504 | 8-749-923-80 | IC | GP1U90XB | | |
| IC505 | 8-759-094-11 | IC | SN755723FT | | |
| IC507 | 8-759-516-41 | IC | CD4052BCM | | |
| IC508 | 8-759-991-11 | IC | XR1091DCP | | |
| | | < JUMPER RESISTOR > | | | |
| JW501 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W (AEP, UK, EE, G, IT) |
| JW502 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W (E, EA, AUS, JE) |
| JW504 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW505 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW506 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW507 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW508 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW509 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW510 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW511 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW512 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW513 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW514 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW516 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW517 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW518 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW519 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW521 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW522 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW523 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W (E, EA, AUS, JE) |
| JW524 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW527 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW528 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW529 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW530 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW531 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW533 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW534 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| JW535 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW536 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW537 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW538 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW539 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW540 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW541 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW542 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW543 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW544 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW545 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW546 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW547 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW548 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW564 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW565 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW566 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW567 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW571 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW575 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW596 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW631 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW638 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW641 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW643 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W(E, EA, AUS, JE) |
| | | < TRANSISTOR > | | | |
| Q501 | 8-729-620-05 | TRANSISTOR | 2SC2603-EF | | |
| Q502 | 8-729-422-57 | TRANSISTOR | UN4111 | | |
| Q503 | 8-729-900-80 | TRANSISTOR | DTC114ES | | |
| Q507 | 8-729-620-05 | TRANSISTOR | 2SC2603-EF | | |
| | | < RESISTOR > | | | |
| R501 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R502 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R503 | 1-216-027-00 | METAL CHIP | 120 | 5% | 1/10W |
| R504 | 1-216-027-00 | METAL CHIP | 120 | 5% | 1/10W |
| R505 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R506 | 1-216-031-00 | METAL CHIP | 180 | 5% | 1/10W |
| R507 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R508 | 1-216-035-00 | METAL CHIP | 270 | 5% | 1/10W |
| R509 | 1-216-037-00 | METAL CHIP | 330 | 5% | 1/10W |
| R510 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R511 | 1-216-043-00 | METAL CHIP | 560 | 5% | 1/10W |
| R512 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R513 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R514 | 1-216-027-00 | METAL CHIP | 120 | 5% | 1/10W |
| R515 | 1-216-027-00 | METAL CHIP | 120 | 5% | 1/10W |
| R516 | 1-216-029-00 | METAL CHIP | 150 | 5% | 1/10W |
| R517 | 1-216-031-00 | METAL CHIP | 180 | 5% | 1/10W |
| R518 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W |
| R519 | 1-216-035-00 | METAL CHIP | 270 | 5% | 1/10W |
| R520 | 1-216-037-00 | METAL CHIP | 330 | 5% | 1/10W |
| R521 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W |
| R522 | 1-216-043-00 | METAL CHIP | 560 | 5% | 1/10W |
| R523 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W |
| R524 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W |
| R525 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R529 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R530 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R531 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R532 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R533 | 1-216-059-00 | METAL CHIP | 2.7K | 5% | 1/10W |
| R534 | 1-216-059-00 | METAL CHIP | 2.7K | 5% | 1/10W |
| R535 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R536 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R537 | 1-216-061-00 | METAL CHIP | 3.3K | 5% | 1/10W |
| R538 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R539 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R540 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R541 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R542 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R543 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R544 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R545 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R546 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R547 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R548 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R549 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R550 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R551 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R552 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R554 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R555 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R556 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R557 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R558 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R559 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R560 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R561 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R562 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R563 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R564 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R565 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R566 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R567 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R568 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W |
| R569 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R570 | 1-216-038-00 | METAL CHIP | 360 | 5% | 1/10W(E, EA, AUS, JE) |
| R571 | 1-216-097-00 | METAL CHIP | 100K | 5% | 1/10W |

When indicating parts by reference number, please include the board name.

**DISPLAY** **LOADING** **MAIN**

| Ref.No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R572 | 1-216-030-00 | METAL CHIP | 160 | 5% | 1/10W |
| R573 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W |
| R574 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R575 | 1-216-049-00 | METAL CHIP | 1K | 5% | 1/10W |
| R577 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R580 | 1-216-047-00 | METAL CHIP | 820 | 5% | 1/10W |
| R581 | 1-216-051-00 | METAL CHIP | 1.2K | 5% | 1/10W |
| R582 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W |
| R583 | 1-216-063-00 | METAL CHIP | 3.9K | 5% | 1/10W |
| R584 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R585 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R586 | 1-216-063-00 | METAL CHIP | 3.9K | 5% | 1/10W |
| R587 | 1-216-075-00 | METAL CHIP | 12K | 5% | 1/10W |
| R588 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R589 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W |
| R590 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W |
| R591 | 1-216-017-00 | METAL CHIP | 47 | 5% | 1/10W |
| R592 | 1-216-017-00 | METAL CHIP | 47 | 5% | 1/10W |
| R593 | 1-216-053-00 | METAL CHIP | 1.5K | 5% | 1/10W |
| R595 | 1-216-065-00 | METAL CHIP | 4.7K | 5% | 1/10W |
| R596 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R597 | 1-216-030-00 | METAL CHIP | 160 | 5% | 1/10W |
| R5001 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W(AEP, UK) |
| R5001 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W (JE) |
| R5001 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W (EE) |
| R5001 | 1-216-057-00 | METAL CHIP | 2.2K | 5% | 1/10W(E, EA, AUS) |
| R5001 | 1-216-041-00 | METAL CHIP | 470 | 5% | 1/10W (G) |
| R5001 | 1-216-050-00 | METAL GLAZE | 1.1K | 5% | 1/10W (IT) |

< VARIABLE RESISTOR >

| | | |
|---|---|---|
| RV501 | 1-223-300-11 | RES, VAR, SLIDE 50K (ECHO) (E, EA, AUS, JE) |
| RV502 | 1-223-300-11 | RES, VAR, SLIDE 50K (MIC LEVEL) (E, EA, AUS, JE) |

< SWITCH >

| | | |
|---|---|---|
| S501 | 1-572-184-11 | SWITCH, KEYBOARD (CLOCK DISPLAY) |
| S502 | 1-572-184-11 | SWITCH, KEYBOARD (TIMER CONT) |
| S503 | 1-572-184-11 | SWITCH, KEYBOARD (SLEEP) |
| S504 | 1-572-184-11 | SWITCH, KEYBOARD (MEMORY) |
| S505 | 1-572-184-11 | SWITCH, KEYBOARD (AUTO) |
| S506 | 1-572-184-11 | SWITCH, KEYBOARD (FM MODE) |
| S507 | 1-572-184-11 | SWITCH, KEYBOARD (TUNING +) |
| S508 | 1-572-184-11 | SWITCH, KEYBOARD (TUNING -) |
| S509 | 1-572-184-11 | SWITCH, KEYBOARD (BAND) |
| S510 | 1-572-184-11 | SWITCH, KEYBOARD (PRESET/TIMER +) |
| S511 | 1-572-184-11 | SWITCH, KEYBOARD (PRESET/TIMER -) |
| S512 | 1-572-184-11 | SWITCH, KEYBOARD (POWER) |
| S513 | 1-572-184-11 | SWITCH, KEYBOARD (TIMER SET) |
| S514 | 1-572-184-11 | SWITCH, KEYBOARD (DBFB) |
| S515 | 1-572-184-11 | SWITCH, KEYBOARD (TAPE) |
| S516 | 1-572-184-11 | SWITCH, KEYBOARD (CD) |
| S517 | 1-572-184-11 | SWITCH, KEYBOARD (TUNER) |
| S518 | 1-572-184-11 | SWITCH, KEYBOARD (PHONO:AEP, UK, EE, G, IT., VIDEO/AUX:E, EA, AUS, JE) |
| S519 | 1-572-184-11 | SWITCH, KEYBOARD (ROCK:AEP, UK, EE, G, IT., STEREO:E, EA, AUS, JE) |
| S520 | 1-572-184-11 | SWITCH, KEYBOARD (POPS:AEP, UK, EE, G, IT., MAIN:E, EA, AUS, JE) |
| S521 | 1-572-184-11 | SWITCH, KEYBOARD (JAZZ:AEP, UK, EE, G, IT., SUB:E, EA, AUS, JE) |
| S522 | 1-572-184-11 | SWITCH, KEYBOARD (HALL:AEP, UK, EE, G, IT., KARAOKE PON:E, EA, AUS, JE) |
| S523 | 1-572-184-11 | SWITCH, KEYBOARD (BGM:AEP, UK, EE, G, IT., PRESET:E, EA, AUS, JE) |
| S524 | 1-572-184-11 | SWITCH, KEYBOARD (DIRECT) |
| S525 | 1-572-184-11 | SWITCH, KEYBOARD (S-SUR) |
| S580 | 1-572-184-11 | SWITCH, KEYBOARD (CURSOR CONTROL ▲) |
| S581 | 1-572-184-11 | SWITCH, KEYBOARD (CURSOR CONTROL ▼) |
| S582 | 1-572-184-11 | SWITCH, KEYBOARD (MEMORY) |
| S583 | 1-572-184-11 | SWITCH, KEYBOARD (FILE) |
| S584 | 1-572-184-11 | SWITCH, KEYBOARD (CURSOR CONTROL ▶) |
| S585 | 1-572-184-11 | SWITCH, KEYBOARD (CURSOR CONTROL ◀) |

< VIBRATOR >

| | | |
|---|---|---|
| X5001 | 1-527-997-21 | VIBRATOR, CRYSTAL (32.768kHz) |

**********

* 1-638-308-11 LOADING BOARD

**********

< CONNECTOR >

| | | |
|---|---|---|
| CN291 | 1-580-918-11 | HOUSING, CONNECTOR 5P |

< SWITCH >

| | | |
|---|---|---|
| S291 | 1-571-924-11 | SWITCH, LEAF (LOAD OUT) |
| S292 | 1-571-924-11 | SWITCH, LEAF (LOAD IN) |

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* A-4356-859-A MAIN BOARD, COMPLETE (E, EA, AUS)
* A-4356-860-A MAIN BOARD, COMPLETE (H71:AEP)
* A-4356-861-A MAIN BOARD, COMPLETE (G, IT)
* A-4356-862-A MAIN BOARD, COMPLETE (EE)
* A-4356-863-A MAIN BOARD, COMPLETE (JE)
* A-4356-885-A MAIN BOARD, COMPLETE (H71M)

**********

< CAPACITOR >

| | | | | | |
|---|---|---|---|---|---|
| C1 | 1-162-195-31 | CERAMIC | 4.7PF | 10% | 50V (H71) |
| C2 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C3 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V |
| C4 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V |
| C5 | 1-101-005-00 | CERAMIC | 22000PF | | 50V(EXCEPT G, IT) |
| C6 | 1-162-195-31 | CERAMIC | 4.7PF | 10% | 50V(E, EA, AUS, JE) |

When indicating parts by reference number, please include the board name.

**MAIN**

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| C7 | 1-136-162-00 | FILM | 0.056uF | 5% | | 50V(E, EA, AUS, JE) |
| C8 | 1-164-159-11 | CERAMIC | 0.1uF | | | 50V(E, EA, AUS, JE) |
| C9 | 1-102-120-00 | CERAMIC | 0.0018uF | 10% | | 50V(AEP, UK, EE) |
| C10 | 1-161-374-11 | CERAMIC | 0.0015uF | 20% | | 50V(AEP, UK, EE) |
| C11 | 1-161-494-00 | CERAMIC | 0.022uF | | | 25V(EXCEPT G, IT) |
| C12 | 1-164-097-11 | CERAMIC | 0.022uF | | | 50V |
| C13 | 1-102-945-00 | CERAMIC | 8.0PF | +-0.5PF | | 50V |
| C14 | 1-124-463-00 | ELECT | 0.1uF | 20% | | 50V |
| C15 | 1-164-095-11 | CERAMIC | 0.01uF | 10% | | 16V |
| C16 | 1-124-925-11 | ELECT | 2.2uF | 20% | | 100V |
| C17 | 1-164-097-11 | CERAMIC | 0.022uF | | | 50V(AEP, UK, EE) |
| C18 | 1-164-097-11 | CERAMIC | 0.022uF | | | 50V(AEP, UK, EE) |
| C19 | 1-136-173-00 | FILM | 0.47uF | 5% | | 50V(AEP, UK, EE) |
| C20 | 1-124-477-11 | ELECT | 47uF | 20% | | 25V |
| C21 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C22 | 1-124-907-11 | ELECT | 10uF | 20% | | 50V |
| C23 | 1-164-095-11 | CERAMIC | 0.01uF | 10% | | 16V |
| C24 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C25 | 1-164-052-11 | CERAMIC | 18PF | 5% | | 50V |
| C26 | 1-164-052-11 | CERAMIC | 18PF | 5% | | 50V |
| C27 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C28 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C29 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C30 | 1-162-207-31 | CERAMIC | 22PF | 5% | | 50V |
| C31 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C32 | 1-124-907-11 | ELECT | 10uF | 20% | | 50V |
| C33 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C34 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C35 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C36 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C37 | 1-124-925-11 | ELECT | 2.2uF | 20% | | 100V |
| C38 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V |
| C39 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V |
| C40 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C41 | 1-123-382-00 | ELECT | 3.3uF | 20% | | 100V |
| C42 | 1-124-907-11 | ELECT | 10uF | 20% | | 50V |
| C43 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V |
| C44 | 1-161-377-00 | CERAMIC | 0.0047uF | 30% | | 16V |
| C45 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | | 50V(EXCEPT G, IT) |
| C45 | 1-162-291-31 | CERAMIC | 560PF | 10% | | 50V(G, IT) |
| C46 | 1-162-282-31 | CERAMIC | 100PF | 10% | | 50V(G, IT) |
| C47 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V |
| C48 | 1-136-157-00 | FILM | 0.022uF | 5% | | 50V |
| C49 | 1-136-157-00 | FILM | 0.022uF | 5% | | 50V |
| C50 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V |
| C51 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V |
| C52 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V |
| C53 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V |
| C54 | 1-161-375-00 | CERAMIC | 0.0022uF | 20% | | 50V |
| C55 | 1-161-375-00 | CERAMIC | 0.0022uF | 20% | | 50V |

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| C56 | 1-124-477-11 | ELECT | 47uF | 20% | | 25V |
| C57 | 1-126-176-11 | ELECT | 220uF | 20% | | 10V |
| C58 | 1-164-097-11 | CERAMIC | 0.022uF | | | 50V |
| C59 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | | 50V |
| C60 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | | 50V |
| C61 | 1-130-478-00 | MYLAR | 0.0039uF | 5% | | 50V |
| C62 | 1-130-478-00 | MYLAR | 0.0039uF | 5% | | 50V |
| C63 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | | 50V |
| C64 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | | 50V(EXCEPT G, IT) |
| C65 | 1-101-884-00 | CERAMIC | 56PF | 5% | | 50V |
| C581 | 1-124-927-11 | ELECT | 4.7uF | 20% | | 100V |
| C582 | 1-124-907-11 | ELECT | 10uF | 20% | | 50V |
| C583 | 1-136-177-00 | FILM | 1uF | 5% | | 50V |
| C601 | 1-162-286-31 | CERAMIC | 220PF | 10% | | 50V |
| C602 | 1-162-286-31 | CERAMIC | 220PF | 10% | | 50V |
| C603 | 1-162-282-31 | CERAMIC | 100PF | 10% | | 50V(AEP, UK, EE, G, IT) |
| C604 | 1-162-282-31 | CERAMIC | 100PF | 10% | | 50V(AEP, UK, EE, G, IT) |
| C605 | 1-124-902-00 | ELECT | 0.47uF | 20% | | 50V(AEP, UK, EE, G, IT) |
| C606 | 1-124-902-00 | ELECT | 0.47uF | 20% | | 50V(AEP, UK, EE, G, IT) |
| C607 | 1-162-282-31 | CERAMIC | 100PF | 10% | | 50V(AEP, UK, EE, G, IT) |
| C608 | 1-162-282-31 | CERAMIC | 100PF | 10% | | 50V(AEP, UK, EE, G, IT) |
| C609 | 1-124-927-11 | ELECT | 4.7uF | 20% | | 100V(AEP, UK, EE, G, IT) |
| C610 | 1-124-927-11 | ELECT | 4.7uF | 20% | | 100V(AEP, UK, EE, G, IT) |
| C611 | 1-161-374-11 | CERAMIC | 0.0015uF | 20% | | 50V(AEP, UK, EE, G, IT) |
| C612 | 1-161-374-11 | CERAMIC | 0.0015uF | 20% | | 50V(AEP, UK, EE, G, IT) |
| C613 | 1-102-126-00 | CERAMIC | 0.0056uF | 10% | | 50V(AEP, UK, EE, G, IT) |
| C614 | 1-102-126-00 | CERAMIC | 0.0056uF | 10% | | 50V(AEP, UK, EE, G, IT) |
| C615 | 1-124-925-11 | ELECT | 2.2uF | 20% | | 100V(AEP, UK, EE, G, IT) |
| C616 | 1-124-925-11 | ELECT | 2.2uF | 20% | | 100V(AEP, UK, EE, G, IT) |
| C617 | 1-124-477-11 | ELECT | 47uF | 20% | | 25V(AEP, UK, EE, G, IT) |
| C618 | 1-124-477-11 | ELECT | 47uF | 20% | | 25V(AEP, UK, EE, G, IT) |
| C619 | 1-164-159-11 | CERAMIC | 0.1uF | | | 50V |
| C620 | 1-164-159-11 | CERAMIC | 0.1uF | | | 50V |
| C621 | 1-164-159-11 | CERAMIC | 0.1uF | | | 50V(E, EA, AUS, JE) |
| C622 | 1-164-159-11 | CERAMIC | 0.1uF | | | 50V(E, EA, AUS, JE) |
| C623 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V(E, EA, AUS, JE) |
| C624 | 1-124-903-11 | ELECT | 1uF | 20% | | 50V(E, EA, AUS, JE) |
| C627 | 1-161-494-00 | CERAMIC | 0.022uF | | | 25V(E, EA, AUS, JE) |
| C628 | 1-161-494-00 | CERAMIC | 0.022uF | | | 25V(E, EA, AUS, JE) |
| C629 | 1-162-282-31 | CERAMIC | 100PF | 10% | | 50V |
| C630 | 1-162-282-31 | CERAMIC | 100PF | 10% | | 50V |
| C631 | 1-162-207-31 | CERAMIC | 22PF | 5% | | 50V |
| C632 | 1-162-207-31 | CERAMIC | 22PF | 5% | | 50V |
| C633 | 1-164-159-11 | CERAMIC | 0.1uF | | | 50V |
| C634 | 1-164-159-11 | CERAMIC | 0.1uF | | | 50V |
| C635 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V(E, EA, AUS, JE) |
| C636 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | | 25V(E, EA, AUS, JE) |
| C637 | 1-124-477-11 | ELECT | 47uF | 20% | | 25V |
| C638 | 1-124-477-11 | ELECT | 47uF | 20% | | 25V |
| C639 | 1-162-282-31 | CERAMIC | 100PF | 10% | | 50V |

When indicating parts by reference number, please include the board name.

# MAIN

| Ref.No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C640 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C641 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C642 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C643 | 1-162-288-31 | CERAMIC | 330PF | 10% | 50V(G, IT) |
| C644 | 1-162-288-31 | CERAMIC | 330PF | 10% | 50V(G, IT) |
| C651 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V(G, IT) |
| C652 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V(G, IT) |
| C701 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C702 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C703 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C704 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C705 | 1-136-164-00 | FILM | 0.082uF | 5% | 50V |
| C706 | 1-136-164-00 | FILM | 0.082uF | 5% | 50V |
| C707 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C708 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C709 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V |
| C710 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V |
| C711 | 1-102-118-00 | CERAMIC | 0.0012uF | 10% | 50V |
| C712 | 1-102-118-00 | CERAMIC | 0.0012uF | 10% | 50V |
| C713 | 1-161-374-11 | CERAMIC | 0.0015uF | 20% | 50V |
| C714 | 1-161-374-11 | CERAMIC | 0.0015uF | 20% | 50V |
| C715 | 1-102-122-00 | CERAMIC | 0.0027uF | 10% | 50V |
| C716 | 1-102-122-00 | CERAMIC | 0.0027uF | 10% | 50V |
| C717 | 1-102-124-00 | CERAMIC | 0.0039uF | 10% | 50V |
| C718 | 1-102-124-00 | CERAMIC | 0.0039uF | 10% | 50V |
| C719 | 1-161-329-00 | CERAMIC | 0.0068uF | 30% | 16V |
| C720 | 1-161-329-00 | CERAMIC | 0.0068uF | 30% | 16V |
| C721 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V |
| C722 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V |
| C723 | 1-136-156-00 | FILM | 0.018uF | 5% | 50V |
| C724 | 1-136-156-00 | FILM | 0.018uF | 5% | 50V |
| C725 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C726 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C727 | 1-101-006-00 | CERAMIC | 0.047uF | | 50V |
| C728 | 1-101-006-00 | CERAMIC | 0.047uF | | 50V |
| C729 | 1-136-162-00 | FILM | 0.056uF | 5% | 50V |
| C730 | 1-136-162-00 | FILM | 0.056uF | 5% | 50V |
| C731 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C732 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C733 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C734 | 1-136-167-00 | FILM | 0.15uF | 5% | 50V |
| C735 | 1-136-169-00 | FILM | 0.22uF | 5% | 50V |
| C736 | 1-136-169-00 | FILM | 0.22uF | 5% | 50V |
| C737 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C738 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C739 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C740 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C741 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C742 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C743 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C744 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C745 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C746 | 1-126-157-11 | ELECT | 10uF | 20% | 16V |
| C747 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C748 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C749 | 1-124-903-11 | ELECT | 1uF | 20% | 50V |
| C750 | 1-126-301-11 | ELECT | 1uF | 20% | 50V |
| C751 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C752 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C753 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C755 | 1-124-443-00 | ELECT | 100uF | 20% | 10V |
| C758 | 1-124-443-00 | ELECT | 100uF | 20% | 10V |
| C759 | 1-124-443-00 | ELECT | 100uF | 20% | 10V |
| C760 | 1-124-443-00 | ELECT | 100uF | 20% | 10V |
| C761 | 1-124-903-11 | ELECT | 1uF | 20% | 50V |
| C762 | 1-124-903-11 | ELECT | 1uF | 20% | 50V |
| C763 | 1-124-927-11 | ELECT | 4.7uF | 20% | 100V |
| C764 | 1-124-927-11 | ELECT | 4.7uF | 20% | 100V |
| C766 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C767 | 1-124-903-11 | ELECT | 1uF | 20% | 50V |
| C768 | 1-124-473-11 | ELECT | 1000uF | 20% | 10V |
| C769 | 1-124-903-11 | ELECT | 1uF | 20% | 50V |
| C771 | 1-162-215-31 | CERAMIC | 47PF | 5% | 50V |
| C772 | 1-162-215-31 | CERAMIC | 47PF | 5% | 50V |

< FILTER >

| | | |
|---|---|---|
| CF1 | 1-527-968-11 | FILTER, CERAMIC |
| CF2 | 1-527-968-11 | FILTER, CERAMIC (G, IT) |
| CF3 | 1-527-968-11 | FILTER, CERAMIC |

< CONNECTOR >

| | | |
|---|---|---|
| CN601 | 1-537-238-11 | TERMINAL BOARD 4P (SPEAKER) |
| * CN602 | 1-564-510-11 | PLUG, CONNECTOR 7P |
| * CN603 | 1-568-454-11 | PIN, CONNECTOR (PC BOARD) 9P |
| * CN604 | 1-568-454-11 | PIN, CONNECTOR (PC BOARD) 9P |
| * CN605 | 1-573-085-11 | CONNECTOR, FPC (NON ZIF) 19P |
| CN606 | 1-695-328-21 | PIN, CONNECTOR(PC BOARD) 5P(E, EA, AUS, JE) |
| * CN607 | 1-564-706-11 | PIN, CONNECTOR (SMALL TYPE) 4P |
| * CN608 | 1-564-511-11 | PLUG, CONNECTOR 8P |
| * CN609 | 1-564-708-11 | PIN, CONNECTOR (SMALL TYPE) 6P |
| CN610 | 1-695-340-21 | PIN, CONNECTOR (PC BOARD) 17P |
| * CN611 | 1-573-048-11 | PLUG, CONNECTOR 11P |
| * CN612 | 1-569-155-11 | PLUG, CONNECTOR 10P |

< TRIMMER >

| | | |
|---|---|---|
| CT1 | 1-141-227-00 | CAP, TRIMMER 20PF (E, EA, AUS, JE) |
| CT2 | 1-141-227-00 | CAP, TRIMMER 20PF (E, EA, AUS, JE) |

< DIODE >

| | | |
|---|---|---|
| D1 | 8-719-976-30 | DIODE KV1560N (E, EA, AUS, JE) |

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| D2 | 8-719-987-63 | DIODE 1N4148M | |
| D581 | 8-719-987-63 | DIODE 1N4148M (E, EA, AUS, JE) | |
| D582 | 8-719-987-63 | DIODE 1N4148M (E, EA, AUS, JE) | |
| D583 | 8-719-987-63 | DIODE 1N4148M (E, EA, AUS, JE) | |
| D584 | 8-719-987-63 | DIODE 1N4148M | |
| D586 | 8-719-987-63 | DIODE 1N4148M | |
| D588 | 8-719-987-63 | DIODE 1N4148M | |
| D601 | 8-719-987-63 | DIODE 1N4148M | |
| D603 | 8-719-987-63 | DIODE 1N4148M | |
| D604 | 8-719-987-63 | DIODE 1N4148M | |
| D605 | 8-719-987-63 | DIODE 1N4148M | |
| | | < FRONTEND > | |
| FE1 | 1-465-673-11 | FRONT END (2 BAND)(FM) (AEP, UK, E, EA, AUS) | |
| FE1 | 1-693-216-11 | FRONT END (FM) (JE) | |
| FE1 | 1-465-396-11 | FRONT END (3 GANG) (FM) (EE) | |
| FE1 | 1-465-007-11 | FRONT END (FM) (4 GANG) (G, IT) | |
| FE2 | 1-236-463-11 | ENCAPSULATED COMPONENT(LW) (AEP, UK, EE) | |
| FE3 | 1-239-261-12 | ENCAPSULATED COMPONENT(MW) (AEP, UK, EE) | |
| FE3 | 1-239-262-11 | ENCAPSULATED COMPONENT(MW) (E, EA, AUS, JE) | |
| FE3 | 1-239-260-11 | ENCAPSULATED COMPONENT(MW) (G, IT) | |
| | | < FILTER > | |
| FL1 | 1-236-465-11 | ENCAPSULATED COMPONENT (G, IT) | |
| FL2 | 1-239-597-11 | FILTER, LOW-PASS | |
| FL3 | 1-239-597-11 | FILTER, LOW-PASS | |
| | | < IC > | |
| IC1 | 8-759-820-91 | IC LC7218 | |
| IC2 | 8-759-090-40 | IC LA1831 | |
| IC581 | 8-759-166-03 | IC M50253PK | |
| IC601 | 8-759-634-51 | IC M5218AP (AEP, UK, EE, G, IT) | |
| IC602 | 8-759-000-48 | IC MC14052BCP | |
| IC603 | 8-759-000-48 | IC MC14052BCP (E, EA, AUS, JE) | |
| IC604 | 8-759-000-48 | IC MC14052BCP (E, EA, AUS, JE) | |
| IC605 | 8-759-634-51 | IC M5218AP | |
| IC606 | 8-759-634-51 | IC M5218AP | |
| IC607 | 8-759-155-51 | IC CXA1492BQ | |
| IC609 | 8-759-821-93 | IC LA5601 | |
| | | < IFT > | |
| IFT1 | 1-404-853-11 | TRANSFORMER, IF (CERAMIC FILTER) (AM IF) | |
| | | < JACK > | |
| J601 | 1-569-181-11 | JACK, PIN 2P (PHONO;AEP, UK, EE, G, IT., VIDEO/AUX;E, EA, AUS, JE) | |
| J602 | 1-569-181-11 | JACK, PIN 2P (SURROUND SPEAKER) (E, EA, AUS, JE) | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | < COIL > | |
| L1 | 1-408-425-00 | INDUCTOR 220uH (AEP, UK, EE) | |
| L3 | 1-408-399-00 | INDUCTOR 1.5uH | |
| * L600 | 1-410-858-11 | INDUCTOR 0uH (G, IT) | |
| * L601 | 1-410-858-11 | INDUCTOR 0uH (G, IT) | |
| | | < TRANSISTOR > | |
| Q1 | 8-729-620-19 | TRANSISTOR 2SC2724-CD | |
| Q2 | 8-729-620-19 | TRANSISTOR 2SC2724-CD (G, IT) | |
| Q3 | 8-729-422-57 | TRANSISTOR UN4111 | |
| Q4 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE (EXCEPT G, IT) | |
| Q5 | 8-729-900-80 | TRANSISTOR DTC114ES (EXCEPT G, IT) | |
| Q6 | 8-729-900-80 | TRANSISTOR DTC114ES (EXCEPT G, IT) | |
| Q7 | 8-729-900-80 | TRANSISTOR DTC114ES (EXCEPT G, IT) | |
| Q8 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE (EXCEPT G, IT) | |
| Q9 | 8-729-900-80 | TRANSISTOR DTC114ES (EXCEPT G, IT) | |
| Q10 | 8-729-201-83 | TRANSISTOR 2SC3112-A | |
| Q11 | 8-729-202-67 | FET 2SK246-GR3 | |
| Q12 | 8-729-201-83 | TRANSISTOR 2SC3112-A (AEP, UK, EE) | |
| Q13 | 8-729-202-67 | FET 2SK246-GR3 (AEP, UK, EE) | |
| Q14 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q15 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q581 | 8-729-900-89 | TRANSISTOR DTC144ES | |
| Q582 | 8-729-900-80 | TRANSISTOR DTC114ES | |
| Q583 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q601 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | |
| Q602 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | |
| Q603 | 8-729-141-30 | TRANSISTOR 2SC3623A-LK | |
| Q604 | 8-729-900-63 | TRANSISTOR DTA124ES | |
| Q751 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| Q752 | 8-729-620-05 | TRANSISTOR 2SC2603-EF | |
| | | < RESISTOR > | |
| R1 | 1-249-411-11 | CARBON 330 5% 1/4W | |
| R2 | 1-249-411-11 | CARBON 330 5% 1/4W | |
| R3 | 1-247-891-00 | CARBON 330K 5% 1/4W | |
| R4 | 1-249-411-11 | CARBON 330 5% 1/4W | |
| R5 | 1-247-891-00 | CARBON 330K 5% 1/4W (G. IT) | |
| R6 | 1-249-411-11 | CARBON 330 5% 1/4W (G, IT) | |
| R7 | 1-249-405-11 | CARBON 100 5% 1/4W | |
| R8 | 1-249-433-11 | CARBON 22K 5% 1/4W(EXCEPT G, IT) | |
| R9 | 1-247-903-00 | CARBON 1M 5% 1/4W(EXCEPT G, IT) | |
| R10 | 1-247-903-00 | CARBON 1M 5% 1/4W (AEP, UK, EE) | |
| R11 | 1-249-425-11 | CARBON 4.7K 5% 1/4W(EXCEPT G, IT) | |
| R12 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R13 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R16 | 1-249-425-11 | CARBON 4.7K 5% 1/4W(EXCEPT G, IT) | |
| R17 | 1-249-425-11 | CARBON 4.7K 5% 1/4W(EXCEPT G, IT) | |
| R18 | 1-249-429-11 | CARBON 10K 5% 1/4W(EXCEPT G, IT) | |

When indicating parts by reference number, please include the board name.

# MAIN

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| R19 | 1-249-429-11 | CARBON 10K 5% 1/4W | (EXCEPT G, IT) |
| R20 | 1-249-429-11 | CARBON 10K 5% 1/4W | (EXCEPT G, IT) |
| R21 | 1-249-405-11 | CARBON 100 5% 1/4W | |
| R22 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R23 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R24 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R25 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R26 | 1-249-414-11 | CARBON 560 5% 1/4W | |
| R27 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R28 | 1-249-410-11 | CARBON 270 5% 1/4W | |
| R29 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | |
| R30 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | (AEP, UK, EE) |
| R31 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | (AEP, UK, EE) |
| R32 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | (AEP, UK, EE) |
| R33 | 1-249-433-11 | CARBON 22K 5% 1/4W | (AEP, UK, EE) |
| R34 | 1-249-414-11 | CARBON 560 5% 1/4W | (AEP, UK, EE) |
| R35 | 1-249-417-11 | CARBON 1K 5% 1/4W | (AEP, UK, EE) |
| R36 | 1-249-410-11 | CARBON 270 5% 1/4W | (AEP, UK, EE) |
| R37 | 1-249-423-11 | CARBON 3.3K 5% 1/4W | (AEP, UK, EE) |
| R38 | 1-249-401-11 | CARBON 47 5% 1/4W | |
| R39 | 1-249-405-11 | CARBON 100 5% 1/4W | |
| R40 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R41 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R42 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R43 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R44 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R45 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R46 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R47 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R48 | 1-249-399-11 | CARBON 33 5% 1/4W | |
| R50 | 1-247-848-11 | CARBON 5.1K 5% 1/4W | |
| R51 | 1-249-412-11 | CARBON 390 5% 1/4W | |
| R52 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R53 | 1-247-842-11 | CARBON 3K 5% 1/4W | |
| R54 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R55 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R56 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R57 | 1-249-430-11 | CARBON 12K 5% 1/4W | (EXCEPT G, IT) |
| R58 | 1-249-430-11 | CARBON 12K 5% 1/4W | (G, IT) |
| R59 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R60 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R61 | 1-247-891-00 | CARBON 330K 5% 1/4W | |
| R62 | 1-247-891-00 | CARBON 330K 5% 1/4W | |
| R63 | 1-249-412-11 | CARBON 390 5% 1/4W | |
| R64 | 1-249-412-11 | CARBON 390 5% 1/4W | |
| R65 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R66 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | |
| R67 | 1-249-409-11 | CARBON 220 5% 1/4W | |
| R68 | 1-249-405-11 | CARBON 100 5% 1/4W | |
| R69 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R70 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R74 | 1-249-433-11 | CARBON 22K 5% 1/4W | |
| R80 | 1-249-429-11 | CARBON 10K 5% 1/4W | (EXCEPT G, IT) |
| R81 | 1-249-429-11 | CARBON 10K 5% 1/4W | (EXCEPT G, IT) |
| R581 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R582 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | |
| R583 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R584 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R585 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R601 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R602 | 1-249-417-11 | CARBON 1K 5% 1/4W | |
| R603 | 1-249-417-11 | CARBON 1K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R603 | 1-249-429-11 | CARBON 10K 5% 1/4W | (E, EA, AUS, JE) |
| R604 | 1-249-417-11 | CARBON 1K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R604 | 1-249-429-11 | CARBON 10K 5% 1/4W | (E, EA, AUS, JE) |
| R605 | 1-249-438-11 | CARBON 56K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R606 | 1-249-438-11 | CARBON 56K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R607 | 1-249-417-11 | CARBON 1K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R608 | 1-249-417-11 | CARBON 1K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R609 | 1-249-437-11 | CARBON 47K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R610 | 1-249-437-11 | CARBON 47K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R611 | 1-247-897-11 | CARBON 560K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R612 | 1-247-897-11 | CARBON 560K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R613 | 1-249-417-11 | CARBON 1K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R614 | 1-249-417-11 | CARBON 1K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R615 | 1-249-405-11 | CARBON 100 5% 1/4W | (AEP, UK, EE, G, IT) |
| R616 | 1-249-405-11 | CARBON 100 5% 1/4W | (AEP, UK, EE, G, IT) |
| R617 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R618 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R619 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R620 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R621 | 1-249-429-11 | CARBON 10K 5% 1/4W | (E, EA, AUS, JE) |
| R622 | 1-249-429-11 | CARBON 10K 5% 1/4W | (E, EA, AUS, JE) |
| R623 | 1-249-389-11 | CARBON 4.7 5% 1/4W | (G, IT) |
| R623 | 1-247-903-00 | CARBON 1M 5% 1/4W | (E, EA, AUS, JE) |
| R624 | 1-249-389-11 | CARBON 4.7 5% 1/4W | (G, IT) |
| R624 | 1-247-903-00 | CARBON 1M 5% 1/4W | (E, EA, AUS, JE) |
| R625 | 1-249-429-11 | CARBON 10K 5% 1/4W | (E, EA, AUS, JE) |
| R626 | 1-249-429-11 | CARBON 10K 5% 1/4W | (E, EA, AUS, JE) |
| R627 | 1-249-437-11 | CARBON 47K 5% 1/4W | (E, EA, AUS, JE) |
| R628 | 1-249-437-11 | CARBON 47K 5% 1/4W | (E, EA, AUS, JE) |
| R629 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R630 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R631 | 1-249-437-11 | CARBON 47K 5% 1/4W | (E, EA, AUS, JE) |
| R632 | 1-249-437-11 | CARBON 47K 5% 1/4W | (E, EA, AUS, JE) |
| R633 | 1-247-864-11 | CARBON 24K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R633 | 1-249-437-11 | CARBON 47K 5% 1/4W | (E, EA, AUS, JE) |
| R634 | 1-247-864-11 | CARBON 24K 5% 1/4W | (AEP, UK, EE, G, IT) |
| R634 | 1-249-437-11 | CARBON 47K 5% 1/4W | (E, EA, AUS, JE) |
| R635 | 1-249-437-11 | CARBON 47K 5% 1/4W | |

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| R636 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R637 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | (E, EA, AUS, JE) |
| R639 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R640 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R641 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R642 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R643 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R644 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R645 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R646 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R647 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R648 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R649 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R650 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R652 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R653 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R655 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | (AEP, UK, EE, G, IT) |
| R656 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | (AEP, UK, EE, G, IT) |
| R701 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R702 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R703 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R704 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R705 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R706 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R707 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R708 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R709 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R710 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R711 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R712 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R713 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R714 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R715 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R716 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R717 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R718 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R719 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R720 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R721 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R722 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R723 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| R724 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| R725 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R726 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R727 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R728 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R729 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R730 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R733 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W | |
| R734 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W | |
| R735 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R751 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | |
| R752 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | |
| R753 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R754 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R780 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R781 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| ⚠R782 | 1-217-637-00 | FUSIBLE | 1 | 5% | 1/4W | F |
| R783 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | |
| R785 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R786 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R787 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R788 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R789 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | |
| R790 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | |
| R793 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | (AEP, UK, EE, G, IT) |
| R794 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | (AEP, UK, EE, G, IT) |
| | | < VARIABLE RESISTOR > | | | | |
| RV1 | 1-238-601-11 | RES, ADJ, CARBON 22K | | | | (FM TUNED LIGHTING LEVEL) |
| | | < RELAY > | | | | |
| RY601 | 1-515-920-11 | RELAY (24V) (SPEAKER) | | | | |
| | | < TRANSFORMER > | | | | |
| T1 | 1-402-424-11 | COIL (ANT, SW3) (E, EA, AUS, JE) | | | | |
| T2 | 1-402-960-11 | COIL (OSC SW3) (E, EA, AUS, JE) | | | | |
| | | < TERMINAL > | | | | |
| TB1 | 1-537-488-11 | TERMINAL BOARD (ANTENNA) (AEP, UK, EE, G, IT) | | | | |
| TB1 | 1-537-238-21 | TERMINAL BOARD (ANTENNA) (E, EA, AUS, JE) | | | | |
| * TB2 | 4-925-530-01 | PLATE, GROUND (H71) | | | | |
| | | < VIBRATOR > | | | | |
| X1 | 1-579-585-11 | VIBRATOR, CRYSTAL (7.2MHz) | | | | |
| X2 | 1-577-075-11 | OSCILLATOR, CERAMIC (456kHz) | | | | |
| X3 | 1-579-777-11 | DISCRIMINATOR, CERAMIC (10.7MHz) | | | | |
| ********** | | | | | | |
| * | A-4356-864-A | POWER AMP BOARD, COMPLETE (E, EA, AUS, JE) | | | | |
| * | A-4356-865-A | POWER AMP BOARD, COMPLETE (AEP, UK, EE) | | | | |
| * | A-4356-866-A | POWER AMP BOARD, COMPLETE (G, IT) | | | | |
| | | ********** | | | | |
| * | 3-309-144-31 | HEAT SINK | | | | |
| | 7-682-548-04 | SCREW +BVTT 3X8 (S) | | | | |
| | | < CAPACITOR > | | | | |
| C800 | 1-124-903-11 | ELECT | 1uF | | 20% | 50V |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

# POWER AMP

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| C801 | 1-124-903-11 | ELECT | 1uF | 20% | 50V | |
| C802 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V | |
| C803 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V | |
| C804 | 1-162-282-31 | CERAMIC | 100PF 10% | | 50V(EXCEPT G, IT) | |
| C804 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V(G, IT) | |
| C805 | 1-162-282-31 | CERAMIC | 100PF 10% | | 50V(EXCEPT G, IT) | |
| C805 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V(G, IT) | |
| C806 | 1-124-910-11 | ELECT | 47uF | 20% | 50V | |
| C807 | 1-124-910-11 | ELECT | 47uF | 20% | 50V | |
| C808 | 1-124-910-11 | ELECT | 47uF | 20% | 50V | |
| C809 | 1-124-910-11 | ELECT | 47uF | 20% | 50V | |
| C810 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C811 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C812 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C813 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C821 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V | |
| C822 | 1-124-917-11 | ELECT | 33uF | 20% | 63V | |
| C823 | 1-124-917-11 | ELECT | 33uF | 20% | 63V | |
| C851 | 1-124-916-11 | ELECT | 22uF | 20% | 63V | |
| C852 | 1-124-925-11 | ELECT | 2.2uF | 20% | 100V | |
| C853 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C854 | 1-126-176-11 | ELECT | 220uF | 20% | 10V | |
| C901 | 1-126-224-11 | ELECT | 4700uF | 20% | 42V | |
| C902 | 1-126-224-11 | ELECT | 4700uF | 20% | 42V | |
| C903 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V | |
| C904 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V | |
| C905 | 1-124-902-00 | ELECT | 0.47uF | 20% | 50V | |
| C906 | 1-124-894-11 | ELECT | 6800uF | 20% | 16V | |
| C907 | 1-124-887-00 | ELECT | 3300uF | 20% | 16V | |
| C908 | 1-124-925-11 | ELECT | 2.2uF | 20% | 100V | |
| C909 | 1-124-925-11 | ELECT | 2.2uF | 20% | 100V | |
| C910 | 1-124-927-11 | ELECT | 4.7uF | 20% | 100V | |
| C911 | 1-124-925-11 | ELECT | 2.2uF | 20% | 100V | |
| C912 | 1-124-472-11 | ELECT | 470uF | 20% | 10V | |
| C913 | 1-124-472-11 | ELECT | 470uF | 20% | 10V | |
| C914 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C915 | 1-124-477-11 | ELECT | 47uF | 20% | 25V | |
| C916 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C917 | 1-124-477-11 | ELECT | 47uF | 20% | 25V | |
| C918 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V | |
| C919 | 1-101-005-00 | CERAMIC | 22000PF | | 50V | |
| C920 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V | |
| C921 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| | | < CONNECTOR > | | | | |
| * CN801 | 1-750-532-11 | CONNECTOR (B TO B) 6P | | | | |
| * CN802 | 1-564-510-11 | PLUG, CONNECTOR 7P | | | | |
| * CN803 | 1-564-511-11 | PLUG, CONNECTOR 8P | | | | |
| * CN804 | 1-564-706-11 | PIN, CONNECTOR (SMALL TYPE) 4P | | | | |

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| | | < DIODE > | | | | |
| D801 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D851 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D901 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D902 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D903 | 8-719-200-02 | DIODE | 10E2 | | | |
| D904 | 8-719-200-02 | DIODE | 10E2 | | | |
| D905 | 8-719-200-02 | DIODE | 10E2 | | | |
| D906 | 8-719-200-02 | DIODE | 10E2 | | | |
| D907 | 8-719-001-67 | DIODE | UZL-12L3 | | | |
| D908 | 8-719-933-41 | DIODE | HZS6C3L | | | |
| D909 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D910 | 8-719-987-63 | DIODE | 1N4148M | | | |
| D911 | 8-719-933-41 | DIODE | HZS6C3L | | | |
| | | < IC > | | | | |
| ⚠IC801 | 8-749-920-09 | IC | STK4152MK2K | | | |
| IC802 | 8-759-111-68 | IC | uPC1237HA | | | |
| IC901 | 8-759-602-66 | IC | M5230L-A | | | |
| | | < TRANSISTOR > | | | | |
| Q801 | 8-729-140-84 | TRANSISTOR | 2SC1841-PAFAEA | | | |
| Q802 | 8-729-140-84 | TRANSISTOR | 2SC1841-PAFAEA | | | |
| Q850 | 8-729-900-63 | TRANSISTOR | DTA124ES | | | |
| Q901 | 8-729-900-80 | TRANSISTOR | DTC114ES | | | |
| Q902 | 8-729-900-89 | TRANSISTOR | DTC144ES | | | |
| Q903 | 8-729-209-15 | TRANSISTOR | 2SD2012 | | | |
| Q904 | 8-729-141-83 | TRANSISTOR | 2SB1094-LK | | | |
| Q905 | 8-729-900-89 | TRANSISTOR | DTC144ES | | | |
| Q906 | 8-729-900-65 | TRANSISTOR | DTA144ES | | | |
| Q907 | 8-729-018-60 | TRANSISTOR | 2SD2012-LC | | | |
| Q908 | 8-729-209-15 | TRANSISTOR | 2SD2012 | | | |
| Q909 | 8-729-900-80 | TRANSISTOR | DTC114ES | | | |
| | | < RESISTOR > | | | | |
| ⚠R677 | 1-212-998-00 | FUSIBLE | 470 | 5% | 1/2W | F |
| R800 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R801 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R802 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | |
| R803 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | |
| R804 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R805 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R806 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R807 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R808 | 1-247-756-11 | CARBON | 2.2K | 5% | 1/2W | |
| R809 | 1-247-756-11 | CARBON | 2.2K | 5% | 1/2W | |
| R810 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R811 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R812 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| R813 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R814 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R815 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| ⚠R816 | 1-217-151-00 | RES, METAL PLATE | 0.22 | | 2W | |
| ⚠R817 | 1-217-151-00 | RES, METAL PLATE | 0.22 | | 2W | |
| R818 | 1-247-727-11 | CARBON | 10 | 5% | 1/2W | |
| R819 | 1-247-727-11 | CARBON | 10 | 5% | 1/2W | |
| R820 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R821 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| ⚠R831 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W | F |
| ⚠R832 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W | F |
| R851 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W | |
| R852 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W | |
| R853 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| R854 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R855 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R856 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R903 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R904 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R905 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W | |
| R906 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R907 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W | |
| R908 | 1-249-407-11 | CARBON | 150 | 5% | 1/4W | |
| R909 | 1-249-407-11 | CARBON | 150 | 5% | 1/4W | |
| R910 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R911 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R912 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R913 | 1-249-423-11 | CARBON | 3.3K | 5% | 1/4W | |
| ⚠R914 | 1-212-990-00 | FUSIBLE | 220 | 5% | 1/2W | F |
| R915 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W | |
| ⚠R916 | 1-212-853-00 | FUSIBLE | 6.8 | 5% | 1/4W | F |
| R917 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | |
| R918 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R919 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R920 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R921 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |

**********

* 1-634-841-14 SW BOARD (DECK-A)
**********

3-343-419-01 HOLDER (S SENSOR A)

< CONNECTOR >

* CNP81 1-568-852-11 SOCKET, CONNECTOR 9P

< IC >

IC81 8-719-710-03 DIODE NJL5165K-B

< RESISTOR >

| | | | | | |
|---|---|---|---|---|---|
| R84 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R85 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |

< SWITCH >

S81 1-571-958-11 SWITCH, PUSH (1 KEY) (STOP DET)
S82 1-571-281-21 SWITCH, LEAF ($CrO_2$ DET)
S86 1-571-281-21 SWITCH, LEAF (HALF DE)

**********

* A-2006-399-A MOUNTED PCB (RA12A), AUDIO (DECK-A)
**********

< CAPACITOR >

| | | | | | |
|---|---|---|---|---|---|
| C11 | 1-163-131-00 | CERAMIC CHIP | 390PF | 5% | 50V |
| C12 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V |
| C13 | 1-124-234-00 | ELECT | 22uF | 20% | 16V |
| C18 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V |
| C21 | 1-163-131-00 | CERAMIC CHIP | 390PF | 5% | 50V |
| C22 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V |
| C23 | 1-124-234-00 | ELECT | 22uF | 20% | 16V |
| C28 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V |
| C31 | 1-124-234-00 | ELECT | 22uF | 20% | 16V |
| C32 | 1-124-234-00 | ELECT | 22uF | 20% | 16V |
| C72 | 1-124-499-11 | ELECT, NONPOLAR | 1uF | 20% | 50V |

< CONNECTOR >

* CNJ31 1-580-782-11 CONNECTOR, BOARD TO BOARD 10P
* CNJ72 1-580-411-11 SOCKET, CONNECTOR 4P
* CNP32 1-580-772-11 PIN, CONNECTOR (PC BOARD) 4P
* CNP71 1-564-719-11 PIN, CONNECTOR (SMALL TYPE) 3P

< IC >

IC31 8-759-106-02 IC uPC4570G2

< JUMPER RESISTOR >

| | | | | | |
|---|---|---|---|---|---|
| JW1 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W |
| JW51 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW52 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW53 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |
| JW54 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W |

< TRANSISTOR >

Q71 8-729-602-36 TRANSISTOR 2SA1602-F

< RESISTOR >

| | | | | | |
|---|---|---|---|---|---|
| R11 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W |
| R12 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W |
| R13 | 1-216-100-00 | METAL GLAZE | 130K | 5% | 1/10W |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

## AUDIO (DECK-A) | SW (DECK-B) | AUDIO (DECK-B)

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| R14 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W | |
| R21 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W | |
| R22 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R23 | 1-216-100-00 | METAL GLAZE | 130K | 5% | 1/10W | |
| R24 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W | |
| R31 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R32 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R71 | 1-216-082-00 | METAL GLAZE | 24K | 5% | 1/10W | |
| R72 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R73 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R74 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| | | < VARIABLE RESISTOR > | | | | |
| RV11 | 1-241-627-11 | RES, ADJ, CARBON 1K (PB LEVEL L) | | | | |
| RV21 | 1-241-627-11 | RES, ADJ, CARBON 1K (PB LEVEL R) | | | | |
| RV71 | 1-241-630-11 | RES, ADJ, CARBON 10K (NORMAL SPEED) | | | | |
| RV72 | 1-241-630-11 | RES, ADJ, CARBON 10K (HIGH SPEED) | | | | |
| ********** | | | | | | |
| * | 1-634-841-14 | SW BOARD (DECK-B) | | | | |
| | | ********** | | | | |
| | 3-343-419-01 | HOLDER (S SENSOR A) | | | | |
| | | < CONNECTOR > | | | | |
| * CNP81 | 1-568-852-11 | SOCKET, CONNECTOR 9P | | | | |
| | | < IC > | | | | |
| IC81 | 8-719-710-03 | DIODE NJL5165K-B | | | | |
| | | < RESISTOR > | | | | |
| R81 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | |
| R82 | 1-247-818-11 | CARBON | 300 | 5% | 1/4W | |
| R83 | 1-247-834-11 | CARBON | 1.3K | 5% | 1/4W | |
| R84 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R85 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W | |
| | | < SWITCH > | | | | |
| S81 | 1-571-958-11 | SWITCH, PUSH (1 KEY) (STOP DET) | | | | |
| S82 | 1-571-281-21 | SWITCH, LEAF ($CrO_2$ DET) | | | | |
| S83 | 1-571-281-21 | SWITCH, LEAF (METAL DET) | | | | |
| S84 | 1-571-281-21 | SWITCH, LEAF (ERASE PROOF DECK-A) | | | | |
| S85 | 1-571-281-21 | SWITCH, LEAF (ERASE PROOF DECK-B) | | | | |
| S86 | 1-571-281-21 | SWITCH, LEAF (HALF DET) | | | | |
| ********** | | | | | | |
| * | A-2006-400-A | MOUNTED PCB (RB22A), AUDIO (DECK-B) | | | | |
| | | ********** | | | | |
| | | < CAPACITOR > | | | | |
| C11 | 1-163-131-00 | CERAMIC CHIP | 390PF | 5% | 50V | |
| C12 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C13 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C14 | 1-136-273-11 | FILM | 75PF | 5% | 630V | |
| C15 | 1-164-080-11 | CERAMIC | 390PF | 10% | 50V | |
| C17 | 1-163-103-00 | CERAMIC CHIP | 27PF | 5% | 50V | |
| C18 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C21 | 1-163-131-00 | CERAMIC CHIP | 390PF | 5% | 50V | |
| C22 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V | |
| C23 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C24 | 1-136-273-11 | FILM | 75PF | 5% | 630V | |
| C25 | 1-164-080-11 | CERAMIC | 390PF | 10% | 50V | |
| C27 | 1-163-103-00 | CERAMIC CHIP | 27PF | 5% | 50V | |
| C28 | 1-163-117-00 | CERAMIC CHIP | 100PF | 5% | 50V | |
| C31 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C32 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C33 | 1-124-234-00 | ELECT | 22uF | 20% | 16V | |
| C51 | 1-163-019-00 | CERAMIC CHIP | 0.0068uF | 10% | 50V | |
| C52 | 1-163-019-00 | CERAMIC CHIP | 0.0068uF | 10% | 50V | |
| C53 | 1-163-022-00 | CERAMIC CHIP | 0.012uF | 10% | 50V | |
| C54 | 1-136-559-11 | FILM | 0.0047uF | 5% | 630V | |
| C56 | 1-164-505-11 | CERAMIC CHIP | 2.2uF | | 16V | |
| C57 | 1-164-346-11 | CERAMIC CHIP | 1uF | | 16V | |
| C58 | 1-163-024-00 | CERAMIC CHIP | 0.018uF | 10% | 50V | |
| C72 | 1-124-499-11 | ELECT, NONPOLAR | 1uF | 20% | 50V | |
| | | < CONNECTOR > | | | | |
| * CNJ31 | 1-580-782-11 | CONNECTOR, BOARD TO BOARD 10P | | | | |
| * CNJ33 | 1-580-782-11 | CONNECTOR, BOARD TO BOARD 10P | | | | |
| * CNJ72 | 1-580-411-11 | SOCKET, CONNECTOR 4P | | | | |
| * CNP32 | 1-580-781-11 | PIN, CONNECTOR (PC BOARD) 7P | | | | |
| * CNP71 | 1-564-719-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | | |
| | | < DIODE > | | | | |
| D31 | 8-719-016-74 | DIODE 1SS352 | | | | |
| | | < IC > | | | | |
| IC31 | 8-759-106-02 | IC uPC4570G2 | | | | |
| | | < JUMPER RESISTOR > | | | | |
| JW1 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW2 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W | |
| JW3 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W | |
| JW4 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W | |
| JW6 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W | |
| JW7 | 1-216-295-00 | METAL CHIP | 0 | 5% | 1/10W | |
| JW52 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW53 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW54 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW55 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW56 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| JW57 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW58 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW59 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW60 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| JW61 | 1-216-296-00 | METAL CHIP | 0 | 5% | 1/8W | |
| | | < COIL > | | | | |
| L11 | 1-410-780-11 | INDUCTOR | 27mH | | | |
| L21 | 1-410-780-11 | INDUCTOR | 27mH | | | |
| | | < TRANSISTOR > | | | | |
| Q51 | 8-729-808-01 | TRANSISTOR | 2SD1622-S | | | |
| Q52 | 8-729-808-01 | TRANSISTOR | 2SD1622-S | | | |
| Q53 | 8-729-808-01 | TRANSISTOR | 2SD1622-S | | | |
| Q71 | 8-729-602-36 | TRANSISTOR | 2SA1602-F | | | |
| | | < RESISTOR > | | | | |
| R11 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W | |
| R12 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R13 | 1-216-100-00 | METAL GLAZE | 130K | 5% | 1/10W | |
| R14 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W | |
| ⚠R15 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W | F |
| R21 | 1-216-099-00 | METAL CHIP | 120K | 5% | 1/10W | |
| R22 | 1-216-025-00 | METAL CHIP | 100 | 5% | 1/10W | |
| R23 | 1-216-100-00 | METAL GLAZE | 130K | 5% | 1/10W | |
| R24 | 1-216-067-00 | METAL CHIP | 5.6K | 5% | 1/10W | |
| ⚠R25 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W | F |
| R31 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| R32 | 1-216-033-00 | METAL CHIP | 220 | 5% | 1/10W | |
| ⚠R41 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | F |
| ⚠R42 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W | F |
| R51 | 1-216-075-00 | METAL CHIP | 12K | 5% | 1/10W | |
| R52 | 1-216-075-00 | METAL CHIP | 12K | 5% | 1/10W | |
| R53 | 1-216-073-00 | METAL CHIP | 10K | 5% | 1/10W | |
| R54 | 1-216-309-00 | METAL CHIP | 5.6 | 5% | 1/10W | |
| R55 | 1-216-309-00 | METAL CHIP | 5.6 | 5% | 1/10W | |
| R56 | 1-216-298-00 | METAL CHIP | 2.2 | 5% | 1/10W | |
| R71 | 1-216-082-00 | METAL GLAZE | 24K | 5% | 1/10W | |
| R72 | 1-216-081-00 | METAL CHIP | 22K | 5% | 1/10W | |
| R73 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| R74 | 1-216-089-00 | METAL CHIP | 47K | 5% | 1/10W | |
| | | < VARIABLE RESISTOR > | | | | |
| RV11 | 1-241-627-11 | RES, ADJ, CARBON 1K (PB LEVEL L) | | | | |
| RV12 | 1-238-551-11 | RES, ADJ, CARBON 220K (REC BIAS L) | | | | |
| RV21 | 1-241-627-11 | RES, ADJ, CARBON 1K (PB LEVEL R) | | | | |
| RV22 | 1-238-551-11 | RES, ADJ, CARBON 220K (REC BIAS R) | | | | |
| RV71 | 1-241-630-11 | RES, ADJ, CARBON 10K (NORMAL SPEED) | | | | |
| RV72 | 1-241-630-11 | RES, ADJ, CARBON 10K (HIGH SPEED) | | | | |

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| | | < RELAY > | | | | |
| RY31 | 1-515-913-11 | RELAY (REC/PB) | | | | |
| | | < TRANSFORMER > | | | | |
| T51 | 1-406-419-11 | COIL, BIAS OSCILLATION | | | | |
| ********** | | | | | | |
| * | A-4356-877-A | TC BOARD, COMPLETE (EXCEPT G, IT) | | | | |
| * | A-4356-878-A | TC BOARD, COMPLETE (G, IT) | | | | |
| | | ********** | | | | |
| | | < CAPACITOR > | | | | |
| C121 | 1-124-443-00 | ELECT | 100uF | 20% | 10V | |
| C122 | 1-101-003-00 | CERAMIC | 0.0047uF | | 50V | |
| C123 | 1-124-903-11 | ELECT | 1uF | 20% | 50V | |
| C125 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C126 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V | |
| C127 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C128 | 1-124-903-11 | ELECT | 1uF | 20% | 50V | |
| C129 | 1-124-902-00 | ELECT | 0.47uF | 20% | 50V | |
| C130 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C131 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C132 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C134 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V | |
| C221 | 1-124-443-00 | ELECT | 100uF | 20% | 10V | |
| C222 | 1-101-003-00 | CERAMIC | 0.0047uF | | 50V | |
| C223 | 1-124-903-11 | ELECT | 1uF | 20% | 50V | |
| C225 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C226 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V | |
| C227 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C228 | 1-124-903-11 | ELECT | 1uF | 20% | 50V | |
| C229 | 1-124-902-00 | ELECT | 0.47uF | 20% | 50V | |
| C230 | 1-124-907-11 | ELECT | 10uF | 20% | 50V | |
| C231 | 1-161-377-00 | CERAMIC | 0.0047uF | 30% | 16V | |
| C232 | 1-101-002-00 | CERAMIC | 0.0022uF | | 50V | |
| C233 | 1-124-902-00 | ELECT | 0.47uF | 20% | 50V | |
| C234 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V | |
| C401 | 1-124-443-00 | ELECT | 100uF | 20% | 10V | |
| C402 | 1-124-126-00 | ELECT | 47uF | 20% | 10V | |
| C403 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V | |
| C404 | 1-124-903-11 | ELECT | 1uF | 20% | 50V | |
| C405 | 1-126-101-11 | ELECT | 100uF | 20% | 16V | |
| C406 | 1-126-101-11 | ELECT | 100uF | 20% | 16V | |
| C451 | 1-126-101-11 | ELECT | 100uF | 20% | 16V | |
| C452 | 1-126-101-11 | ELECT | 100uF | 20% | 16V | |
| C453 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V | |
| C454 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V | |
| C456 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V | |
| C457 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

## TC

| Ref. No. | Part No. | Description | | Remarks |
|---|---|---|---|---|
| C458 | 1-164-159-11 | CERAMIC | 0.1uF | 50V |
| C459 | 1-164-159-11 | CERAMIC | 0.1uF | 50V |
| | | < CONNECTOR > | | |
| * CN401 | 1-564-517-11 | PLUG, CONNECTOR 2P (TEST MODE) | | |
| CN402 | 1-580-783-11 | CONNECTOR, BOARD TO BOARD 10P | | |
| CN403 | 1-580-783-11 | CONNECTOR, BOARD TO BOARD 10P | | |
| CN404 | 1-580-783-11 | CONNECTOR, BOARD TO BOARD 10P | | |
| CN405 | 1-573-101-11 | SOCKET, CONNECTOR 9P | | |
| CN406 | 1-573-101-11 | SOCKET, CONNECTOR 9P | | |
| * CN407 | 1-565-980-11 | HOUSING, CONNECTOR(PC BOARD) 9P | | |
| * CN408 | 1-565-980-11 | HOUSING, CONNECTOR(PC BOARD) 9P | | |
| CN409 | 1-695-366-21 | PIN, CONNECTOR (PC BOARD) 5P | | |
| CN410 | 1-695-376-21 | PIN, CONNECTOR (PC BOARD) 15P | | |
| * CN411 | 1-564-520-11 | PLUG, CONNECTOR 5P | | |
| | | < DIODE > | | |
| D301 | 8-719-200-02 | DIODE | 10E2 | |
| D302 | 8-719-200-02 | DIODE | 10E2 | |
| D351 | 8-719-987-63 | DIODE | 1N4148M | |
| D402 | 8-719-987-63 | DIODE | 1N4148M | |
| D403 | 8-719-987-63 | DIODE | 1N4148M | |
| | | < IC > | | |
| IC401 | 8-759-166-04 | IC | M50964-260FPK | |
| IC402 | 8-759-520-90 | IC | PST572E | |
| IC403 | 8-759-098-75 | IC | HA12171NT | |
| IC404 | 8-759-207-05 | IC | TA7272P | |
| | | < COIL > | | |
| L401 | 1-410-482-31 | INDUCTOR | 100uH | |
| L402 | 1-410-482-31 | INDUCTOR | 100uH | |
| | | < TRANSISTOR > | | |
| Q101 | 8-729-620-05 | TRANSISTOR | 2SC2603-EF | |
| Q201 | 8-729-620-05 | TRANSISTOR | 2SC2603-EF | |
| Q305 | 8-729-900-80 | TRANSISTOR | DTC114ES | |
| Q306 | 8-729-620-05 | TRANSISTOR | 2SC2603-EF | |
| Q400 | 8-729-422-57 | TRANSISTOR | UN4111 | |
| Q401 | 8-729-900-65 | TRANSISTOR | DTA144ES | |
| Q402 | 8-729-900-65 | TRANSISTOR | DTA144ES | |
| Q403 | 8-729-900-65 | TRANSISTOR | DTA144ES | |
| Q404 | 8-729-900-65 | TRANSISTOR | DTA144ES | |
| Q405 | 8-729-900-65 | TRANSISTOR | DTA144ES | |
| Q407 | 8-729-900-89 | TRANSISTOR | DTC144ES | |
| Q408 | 8-729-900-65 | TRANSISTOR | DTA144ES | |
| Q411 | 8-729-801-84 | TRANSISTOR | 2SB1013-4 | |
| Q412 | 8-729-801-84 | TRANSISTOR | 2SB1013-4 | |
| Q413 | 8-729-900-65 | TRANSISTOR | DTA144ES | |
| Q414 | 8-729-900-89 | TRANSISTOR | DTC144ES | |
| Q415 | 8-729-620-05 | TRANSISTOR | 2SC2603-EF | |
| | | < RESISTOR > | | |
| R121 | 1-249-430-11 | CARBON | 12K 5% 1/4W | |
| R122 | 1-249-431-11 | CARBON | 15K 5% 1/4W | |
| R123 | 1-215-451-00 | METAL | 18K 1% 1/6W | |
| R124 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R125 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R127 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R130 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R131 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W | |
| R132 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R133 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R135 | 1-247-864-11 | CARBON | 24K 5% 1/4W | |
| R137 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W | |
| R141 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | |
| R142 | 1-247-838-00 | CARBON | 2K 5% 1/4W | |
| R143 | 1-247-846-11 | CARBON | 4.3K 5% 1/4W | |
| R144 | 1-249-433-11 | CARBON | 22K 5% 1/4W | |
| R145 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W | |
| R221 | 1-249-430-11 | CARBON | 12K 5% 1/4W | |
| R222 | 1-249-431-11 | CARBON | 15K 5% 1/4W | |
| R223 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W | |
| R224 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R225 | 1-249-441-11 | CARBON | 100K 5% 1/4W | |
| R226 | 1-247-864-11 | CARBON | 24K 5% 1/4W | |
| R227 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R229 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R230 | 1-249-432-11 | CARBON | 18K 5% 1/4W | |
| R231 | 1-247-885-00 | CARBON | 180K 5% 1/4W | |
| R241 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | |
| R242 | 1-247-838-00 | CARBON | 2K 5% 1/4W | |
| R243 | 1-247-846-11 | CARBON | 4.3K 5% 1/4W | |
| R244 | 1-249-433-11 | CARBON | 22K 5% 1/4W | |
| R245 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W | |
| ⚠R301 | 1-249-390-81 | CARBON | 5.6 5% 1/4W | F |
| ⚠R305 | 1-212-857-00 | FUSIBLE | 10 5% 1/4W | F |
| ⚠R306 | 1-212-857-00 | FUSIBLE | 10 5% 1/4W | F |
| R351 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R401 | 1-249-429-11 | CARBON | 10K 5% 1/4W | |
| R402 | 1-247-903-00 | CARBON | 1M 5% 1/4W | |
| R403 | 1-247-895-00 | CARBON | 470K 5% 1/4W | |
| R404 | 1-247-895-00 | CARBON | 470K 5% 1/4W | |
| R405 | 1-249-408-11 | CARBON | 180 5% 1/4W | |
| R406 | 1-249-408-11 | CARBON | 180 5% 1/4W | |
| R408 | 1-249-408-11 | CARBON | 180 5% 1/4W | |
| R409 | 1-249-408-11 | CARBON | 180 5% 1/4W | |
| R411 | 1-249-407-11 | CARBON | 150 5% 1/4W | |
| R412 | 1-249-410-11 | CARBON | 270 5% 1/4W | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| R413 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R414 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | |
| R415 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R416 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R417 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R419 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | |
| R420 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R421 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R422 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R431 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R432 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W | |
| R433 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R434 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W | |
| R451 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R452 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R453 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R454 | 1-247-872-11 | CARBON | 51K | 5% | 1/4W | |
| R455 | 1-247-862-11 | CARBON | 20K | 5% | 1/4W | |
| R456 | 1-247-866-11 | CARBON | 30K | 5% | 1/4W | |
| R457 | 1-247-872-11 | CARBON | 51K | 5% | 1/4W | |
| R458 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R459 | 1-249-381-11 | CARBON | 1 | 5% | 1/4W | |
| R460 | 1-249-381-11 | CARBON | 1 | 5% | 1/4W | |
| R461 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R462 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | |
| R463 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R464 | 1-247-872-11 | CARBON | 51K | 5% | 1/4W | |
| R465 | 1-247-862-11 | CARBON | 20K | 5% | 1/4W | |
| R466 | 1-247-866-11 | CARBON | 30K | 5% | 1/4W | |
| R467 | 1-247-872-11 | CARBON | 51K | 5% | 1/4W | |
| R468 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | |
| R469 | 1-249-381-11 | CARBON | 1 | 5% | 1/4W | |
| R470 | 1-249-381-11 | CARBON | 1 | 5% | 1/4W | |
| R471 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R472 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R473 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W | |
| R474 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R475 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W | |
| R476 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R477 | 1-249-410-11 | CARBON | 270 | 5% | 1/4W | |
| R478 | 1-249-410-11 | CARBON | 270 | 5% | 1/4W | |

< VARIABLE RESISTOR >

| | | |
|---|---|---|
| RV103 | 1-241-136-11 | RES, ADJ, CARBON 10K (REC LEVEL L) |
| RV203 | 1-241-136-11 | RES, ADJ, CARBON 10K (REC LEVEL R) |

< VIBRATOR >

| | | |
|---|---|---|
| X401 | 1-577-358-21 | VIBRATOR, CERAMIC (4MHz) |

**********

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| * | A-4356-879-A | SWITCH BOARD, COMPLETE | |
| | | ********** | |

< CONNECTOR >

| | | |
|---|---|---|
| CN551 | 1-695-376-21 | PIN, CONNECTOR (PC BOARD) 15P |

< DIODE >

| | | | |
|---|---|---|---|
| D551 | 8-719-032-87 | LED | SEL5420S-TP (◁ ◀◀ AMS DECK-A) |
| D552 | 8-719-032-87 | LED | SEL5420S-TP (▷ ▶▶ AMS DECK-A) |
| D553 | 8-719-032-83 | LED | SEL5220S-TP (HIGH SPEED DUBBING) |
| D555 | 8-719-032-83 | LED | SEL5220S-TP (CD SYNCHRO) |
| D556 | 8-719-033-07 | LED | SEL5920A-TP15 (▮▮ PAUSE) |
| D557 | 8-719-032-87 | LED | SEL5420S-TP (◁ ◀◀ AMS DECK-B) |
| D558 | 8-719-032-87 | LED | SEL5420S-TP (▷ ▶▶ AMS DECK-B) |
| D559 | 8-719-032-83 | LED | SEL5220S-TP (● REC) |

< RESISTOR >

| | | | | | |
|---|---|---|---|---|---|
| R551 | 1-249-407-11 | CARBON | 150 | 5% | 1/4W |
| R552 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R553 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R554 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R555 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R556 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R557 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W |
| R558 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R559 | 1-249-407-11 | CARBON | 150 | 5% | 1/4W |
| R560 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R561 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R562 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R563 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| R564 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R565 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R566 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W |
| R574 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W |
| R575 | 1-249-406-11 | CARBON | 120 | 5% | 1/4W |
| R576 | 1-249-406-11 | CARBON | 120 | 5% | 1/4W |
| R577 | 1-249-407-11 | CARBON | 150 | 5% | 1/4W |
| R578 | 1-249-408-11 | CARBON | 180 | 5% | 1/4W |
| R579 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W |
| R580 | 1-249-410-11 | CARBON | 270 | 5% | 1/4W |
| R581 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R582 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R583 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R584 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W |
| R585 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W |
| R586 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |

< SWITCH >

| | | |
|---|---|---|
| S551 | 1-572-184-11 | SWITCH, KEYBOARD (■ DECK-A) |

When indicating parts by reference number, please include the board name.

# SWITCH | VOL | JACK | POWER SUPPLY

| Ref.No. | Part No. | Description | Remarks |
|---|---|---|---|
| S552 | 1-572-184-11 | SWITCH, KEYBOARD (▷ ▶▶ AMS DECK-A) | |
| S553 | 1-572-184-11 | SWITCH, KEYBOARD (◁ ◀◀ AMS DECK-A) | |
| S554 | 1-572-184-11 | SWITCH, KEYBOARD (◀◀ DECK-B) | |
| S555 | 1-572-184-11 | SWITCH, KEYBOARD (▶▶ DECK-B) | |
| S556 | 1-572-184-11 | SWITCH, KEYBOARD (● REC DECK-B) | |
| S557 | 1-572-184-11 | SWITCH, KEYBOARD (HIGH SPEED DUBBING) | |
| S559 | 1-572-184-11 | SWITCH, KEYBOARD (CD SYNCHRO) | |
| S560 | 1-572-184-11 | SWITCH, KEYBOARD (■ DECK-B) | |
| S561 | 1-572-184-11 | SWITCH, KEYBOARD (❚❚ PAUSE DECK-B) | |
| S562 | 1-572-184-11 | SWITCH, KEYBOARD (▷ ▶▶ AMS DECK-B) | |
| S563 | 1-572-184-11 | SWITCH, KEYBOARD (◁ ◀◀ AMS DECK-B) | |
| S564 | 1-572-184-11 | SWITCH, KEYBOARD (◀◀ DECK-A) | |
| S565 | 1-572-184-11 | SWITCH, KEYBOARD (▶▶ DECK-A) | |
| S566 | 1-572-378-11 | SWITCH, SLIDE (DIRECTION) | |
| S567 | 1-572-184-11 | SWITCH, KEYBOARD (⏏ OPEN/CLOSE) | |
| S568 | 1-572-184-11 | SWITCH, KEYBOARD (■) | |
| S569 | 1-572-184-11 | SWITCH, KEYBOARD (❚❚) | |
| S570 | 1-572-184-11 | SWITCH, KEYBOARD (▷) | |
| S571 | 1-572-184-11 | SWITCH, KEYBOARD ( ▯◁◁ ◀◀) | |
| S572 | 1-572-184-11 | SWITCH, KEYBOARD ( ▷▷▯ ▶▶) | |
| S573 | 1-572-184-11 | SWITCH, KEYBOARD (TIME) | |
| S574 | 1-572-184-11 | SWITCH, KEYBOARD (REPEAT) | |
| S575 | 1-572-184-11 | SWITCH, KEYBOARD (PROGRAM) | |
| S576 | 1-572-184-11 | SWITCH, KEYBOARD (SHUFFLE) | |
| S577 | 1-572-184-11 | SWITCH, KEYBOARD (CONTINUE) | |
| S578 | 1-572-184-11 | SWITCH, KEYBOARD (EDIT) | |
| S579 | 1-572-184-11 | SWITCH, KEYBOARD (CLEAR) | |
| S580 | 1-572-184-11 | SWITCH, KEYBOARD (CHECK) | |
| S587 | 1-572-347-31 | SWITCH, SLIDE (DOLBY NR) | |

**********

* 1-646-894-11 VOL BOARD
*********

< CAPACITOR >

| | | | | | |
|---|---|---|---|---|---|
| C200 | 1-126-924-11 | ELECT | 330uF | 20% | 10V |
| C201 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |
| C202 | 1-124-907-11 | ELECT | 10uF | 20% | 50V |

< CONNECTOR >

* CN201 1-566-972-11 PIN, CONNECTOR (PC BOARD) 7P

< IC >

IC200 8-759-820-62 IC LB1639

< RESISTOR >

| | | | | | |
|---|---|---|---|---|---|
| R200 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R201 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R202 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |

< VARIABLE RESISTOR >

RV200 1-223-301-11 RES, VAR, CARBON(WITH MOTOR) 10K (VOLUME)

**********

* 1-646-897-11 JACK BOARD
**********

< CAPACITOR >

| | | | | | |
|---|---|---|---|---|---|
| C250 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C251 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C260 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V(E, EA, AUS, JE) |
| C261 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V(E, EA, AUS, JE) |
| C262 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V(E, EA, AUS, JE) |
| C263 | 1-162-215-31 | CERAMIC | 47PF | 5% | 50V(E, EA, AUS, JE) |
| C264 | 1-124-463-00 | ELECT | 0.1uF | 20% | 50V(E, EA, AUS, JE) |
| C265 | 1-124-463-00 | ELECT | 0.1uF | 20% | 50V(E, EA, AUS, JE) |
| C266 | 1-124-463-00 | ELECT | 0.1uF | 20% | 50V(E, EA, AUS, JE) |
| C267 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V(E, EA, AUS, JE) |
| C268 | 1-124-465-00 | ELECT | 0.47uF | 20% | 50V(E, EA, AUS, JE) |

< CONNECTOR >

| | | |
|---|---|---|
| CN251 | 1-695-366-21 | PIN, CONNECTOR(PC BOARD) 5P |
| CN261 | 1-695-366-21 | PIN, CONNECTOR(PC BOARD) 5P(E, EA, AUS, JE) |

< IC >

IC250 8-759-634-51 IC M5218AP (E, EA, AUS, JE)

< JACK >

| | | |
|---|---|---|
| J251 | 1-750-032-11 | JACK (DIA. 3.5) (HEADPHONES) |
| J261 | 1-750-032-11 | JACK (DIA. 3.5) (MIX MIC) (E, EA, AUS, JE) |

< RESISTOR >

| | | | | | |
|---|---|---|---|---|---|
| R250 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R251 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W |
| R260 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W(E, EA, AUS, JE) |
| R261 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W(E, EA, AUS, JE) |
| R262 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W(E, EA, AUS, JE) |
| R263 | 1-247-885-00 | CARBON | 180K | 5% | 1/4W(E, EA, AUS, JE) |
| R264 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W(E, EA, AUS, JE) |

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* 1-646-898-11 POWER SUPPLY BOARD
**********

* 1-533-293-11 FUSE HOLDER

< CAPACITOR >

| | | | | |
|---|---|---|---|---|
| C921 | 1-164-159-11 | CERAMIC | 0.1uF | 50V |
| C922 | 1-164-159-11 | CERAMIC | 0.1uF | 50V |

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C923 | 1-124-910-11 | ELECT | 47uF | 20% | 50V |
| C924 | 1-124-910-11 | ELECT | 47uF | 20% | 50V |
| C925 | 1-124-910-11 | ELECT | 47uF | 20% | 50V |
| C926 | 1-124-910-11 | ELECT | 47uF | 20% | 50V |
| | | < CONNECTOR > | | | |
| * CN911 | 1-564-321-00 | PIN, CONNECTOR 2P | | | |
| * CN912 | 1-750-533-11 | CONNECTOR (B TO B) 6P | | | |
| * CN913 | 1-564-708-11 | PIN, CONNECTOR (SMALL TYPE) 6P | | | |
| | | < DIODE > | | | |
| D911 | 8-719-312-09 | DIODE | RBA-402 | | |
| D912 | 8-719-934-13 | DIODE | HZS24-1L | | |
| D913 | 8-719-934-13 | DIODE | HZS24-1L | | |
| | | < TRANSISTOR > | | | |
| Q911 | 8-729-018-59 | TRANSISTOR | 2SB1375-LC | | |
| Q912 | 8-729-018-60 | TRANSISTOR | 2SD2012-LC | | |
| | | < RESISTOR > | | | |
| ⚠R921 | 1-219-134-11 | FUSIBLE | 0.1 | 5% | 1/4W F |
| ⚠R922 | 1-219-134-11 | FUSIBLE | 0.1 | 5% | 1/4W F |
| R923 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| R924 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W |
| ⚠R925 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W F |
| ⚠R926 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W F |
| | | < SWITCH > | | | |
| ⚠S901 | 1-572-675-11 | SWITCH, POWER VOLTAGE CHANGE (VOLTAGE SELECTOR) (E, EA, JE) | | | |
| ********** | | | | | |
| * | A-4356-880-A | ECHO BOARD, COMPLETE (E, EA, AUS, JE) | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C610 | 1-126-101-11 | ELECT | 100uF | 20% | 16V(E, EA, AUS, JE) |
| C611 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V(E, EA, AUS, JE) |
| C612 | 1-162-291-31 | CERAMIC | 560PF | 10% | 50V(E, EA, AUS, JE) |
| C613 | 1-124-903-11 | ELECT | 1uF | 20% | 50V(E, EA, AUS, JE) |
| C614 | 1-102-126-00 | CERAMIC | 0.0056uF | 10% | 50V(E, EA, AUS, JE) |
| C615 | 1-124-903-11 | ELECT | 1uF | 20% | 50V(E, EA, AUS, JE) |
| C616 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V(E, EA, AUS, JE) |
| C617 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V(E, EA, AUS, JE) |
| C618 | 1-124-910-11 | ELECT | 47uF | 20% | 50V(E, EA, AUS, JE) |
| C619 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V(E, EA, AUS, JE) |
| C620 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V(E, EA, AUS, JE) |
| C621 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V(E, EA, AUS, JE) |
| C622 | 1-161-374-11 | CERAMIC | 0.0015uF | 20% | 50V(E, EA, AUS, JE) |
| C623 | 1-124-903-11 | ELECT | 1uF | 20% | 50V(E, EA, AUS, JE) |
| C624 | 1-136-165-00 | FILM | 0.1uF | 5% | 50V(E, EA, AUS, JE) |
| C625 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V(E, EA, AUS, JE) |
| C629 | 1-124-907-11 | ELECT | 10uF | 20% | 50V(E, EA, AUS, JE) |
| C630 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V(E, EA, AUS, JE) |
| C631 | 1-161-374-11 | CERAMIC | 0.0015uF | 20% | 50V(E, EA, AUS, JE) |
| C632 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V(E, EA, AUS, JE) |
| C633 | 1-161-379-00 | CERAMIC | 0.01uF | 20% | 25V(E, EA, AUS, JE) |
| C634 | 1-124-907-11 | ELECT | 10uF | 20% | 50V(E, EA, AUS, JE) |
| | | < CONNECTOR > | | | |
| CN611 | 1-695-366-21 | PIN, CONNECTOR(PC BOARD) | | | 5P(E, EA, AUS, JE) |
| CN612 | 1-695-366-21 | PIN, CONNECTOR(PC BOARD) | | | 5P(E, EA, AUS, JE) |
| * CN613 | 1-565-041-11 | PIN, CONNECTOR(PC BOARD) | | | 5P(E, EA, AUS, JE) |
| | | < DIODE > | | | |
| D610 | 8-719-028-15 | LED | LED-SX-TP (E, EA, AUS, JE) | | |
| | | < IC > | | | |
| IC602 | 8-759-634-51 | IC | M5218AP (E, EA, AUS, JE) | | |
| IC610 | 8-759-166-05 | IC | M65831PK (E, EA, AUS, JE) | | |
| | | < COIL > | | | |
| L610 | 1-408-104-00 | INDUCTOR | 1mH (E, EA, AUS, JE) | | |
| | | < RESISTOR > | | | |
| R610 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W(E, EA, AUS, JE) |
| R611 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W(E, EA, AUS, JE) |
| R612 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W(E, EA, AUS, JE) |
| R613 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W(E, EA, AUS, JE) |
| R614 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W(E, EA, AUS, JE) |
| R615 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W(E, EA, AUS, JE) |
| R616 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W(E, EA, AUS, JE) |
| R617 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W(E, EA, AUS, JE) |
| R618 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W(E, EA, AUS, JE) |
| R619 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W(E, EA, AUS, JE) |
| R623 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W(E, EA, AUS, JE) |
| R624 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W(E, EA, AUS, JE) |
| R625 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W(E, EA, AUS, JE) |
| R626 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W(E, EA, AUS, JE) |
| R627 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W(E, EA, AUS, JE) |
| R628 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W(E, EA, AUS, JE) |
| R629 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W(E, EA, AUS, JE) |
| R630 | 1-247-887-00 | CARBON | 220K | 5% | 1/4W(E, EA, AUS, JE) |
| R631 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W(E, EA, AUS, JE) |
| | | < VIBRATOR > | | | |
| X610 | 1-577-358-21 | VIBRATOR, CERAMIC (2MHz) (E, EA, AUS, JE) | | | |
| ********** | | | | | |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | MISCELLANEOUS | |
| | | ********** | |
| 10 | 1-501-594-21 | ANTENNA (FM) (G, IT) | |
| 56 | 1-696-922-11 | WIRE (FLAT TYPE) (15 CORE) | |
| 57 | 1-696-923-11 | WIRE (FLAT TYPE) (5 CORE) | |
| 60 | 1-690-102-11 | WIRE (FLAT TYPE) (17 CORE) | |
| 65 | 1-690-588-31 | WIRE (FLAT TYPE) (9 CORE) | |
| 68 | 1-696-921-11 | WIRE (FLAT TYPE) (19 CORE) | |
| ⚠71 | 1-574-902-11 | CORD, POWER (E, JE) | |
| ⚠71 | 1-590-042-11 | CORD, POWER (WITH CORE) (G, IT) | |
| ⚠71 | 1-590-083-11 | CORD, POWER (AUS) | |
| ⚠71 | 1-696-169-11 | CORD, POWER (AEP, EE, EA) | |
| ⚠71 | 1-696-570-21 | CORD, POWER (UK) | |
| ⚠72 | 1-569-007-11 | ADAPTOR, CONVERSION 2P (E, JE) | |
| ⚠72 | 1-569-008-11 | ADAPTOR, CONVERSION 2P (EA) | |
| 167 | 1-638-983-11 | PC BOARD, MOTOR FLEXIBLE | |
| 268 | 1-590-530-11 | WIRE (FLAT TYPE) (12 CORE) | |
| ⚠304 | 8-848-144-11 | OPTICAL PICK-UP BLOCK KSS-240A | |
| 305 | 1-575-001-11 | WIRE (FLAT TYPE) (12 CORE) | |
| ANT1 | 1-501-321-51 | ANTENNA, TELESCOPIC (H71) | |
| ⚠F901 | 1-532-285-00 | FUSE (T1.25A 250V) | |
| ⚠F902 | 1-532-203-00 | FUSE (T2A 250V) (E, EA, JE) | |
| HP101 | A-2003-837-F | BASE ASSY, HEAD (DECK-A) | |
| HRPE101 | A-2003-838-A | DECK ASSY, HEAD (DECK-B) | |
| M101A | X-3363-501-1 | MOTOR ASSY (REEL) (DECK-A) | |
| M101B | X-3363-501-1 | MOTOR ASSY (REEL) (DECK-B) | |
| M102A | X-3359-417-1 | MOTOR ASSY (CAPSTAN) (DECK-A) | |
| M102B | X-3359-417-1 | MOTOR ASSY (CAPSTAN) (DECK-B) | |
| M291 | A-4608-362-A | MOTOR (L) ASSY (LOADING) | |
| M301 | X-4917-523-3 | MOTOR ASSY (SPINDLE) | |
| M302 | X-4917-504-1 | MOTOR ASSY (SLED) | |
| ⚠T901 | 1-423-471-11 | TRANSFORMER, POWER (AEP, EE, G, IT) | |
| ⚠T901 | 1-423-472-11 | TRANSFORMER, POWER (AUS, UK) | |
| ⚠T901 | 1-423-473-11 | TRANSFORMER, POWER (E, EA, JE) | |

**********

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | ACCESSORIES & PACKING MATERIALS | |
| | | ********** | |
| | 1-466-957-11 | REMOTE COMMANDER (RM-S71) | |
| | 4-941-762-11 | COVER (MLY), BATTERY (for RM-S71) | |
| * | 4-957-906-01 | CUSHION (FRONT) | |
| * | 4-957-907-01 | CUSHION (REAR) | |

**********

## HARDWARE LIST

| | | |
|---|---|---|
| #1 | 7-685-871-01 | SCREW +BVTT 3X6 (S) |
| #2 | 7-685-649-79 | SCREW +BVTP 3X14 TYPE2 N-S |
| #3 | 7-685-648-79 | SCREW +BVTP 3X12 TYPE2 N-S |
| #5 | 7-621-255-15 | SCREW +PTT 2X3 (S) |
| #6 | 7-621-770-67 | SCREW +PTT 2.6X6 (S) |
| #7 | 7-627-556-08 | SCREW +P 2.6X2.8 |
| #8 | 7-621-775-00 | SCREW +B 2.6X3 |
| #9 | 7-685-234-19 | SCREW +KTP 2.6X8 TYPE2NON-SLIT |
| #10 | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 N-S |
| #11 | 7-624-105-04 | STOP RING 2.3, TYPE -E |
| #12 | 7-621-775-10 | SCREW +B 2.6X4 |
| #14 | 7-682-549-04 | SCREW +BVTT 3X10 (S) |

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

9-957-654-11

Sony Corporation
Audio Group

English
93C0565-1
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# SS-H71

# SERVICE MANUAL

*AEP Model*

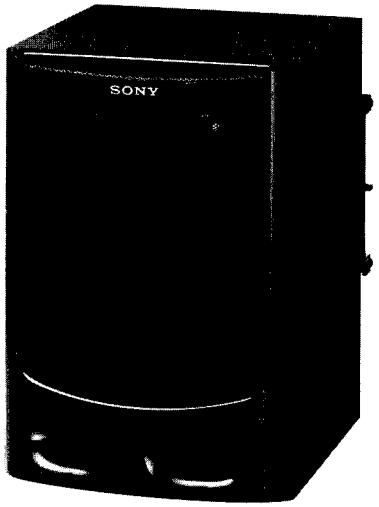



Photo : L-CH

## SPECIFICATIONS

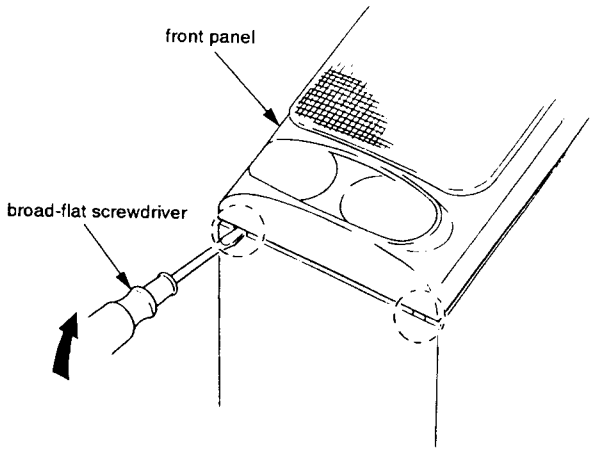
| | |
|---|---|
| Speaker system | 3-way system |
| Speaker units | Woofer : 14 cm dia., cone type |
| | Tweeter : 5 cm dis., cone type |
| | Super Tweeter : 2 cm dia., dome type |
| Enclosure | Bass reflex |
| Frequency range | 60Hz – 20kHz |
| Sensitivity | 88 dB /W/m |
| Rated impedance | 6 ohms |
| Dimensions | Approx. 200 x 285 x 240 mm |
| | (8 x 11 1/4 x 9 1/2 inches) |
| Mass | Approx. 3.2 kg (7 lb 1oz) net per speaker |

Design and specifications subject to change without notice.

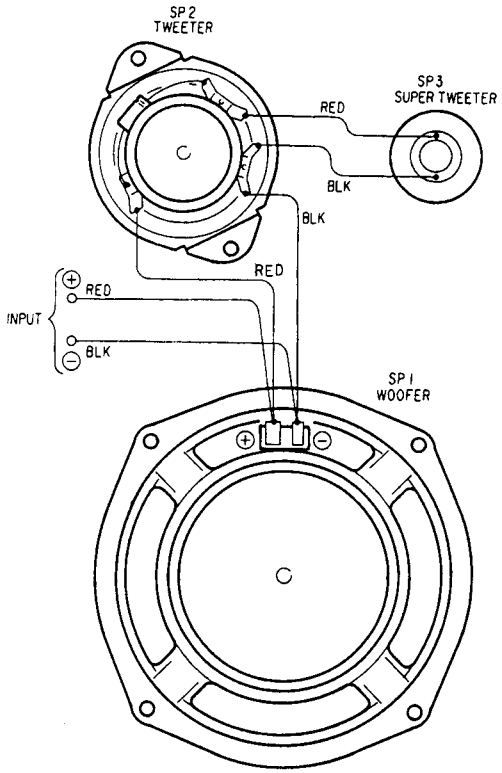
This set is the speaker system in FH-B710.

## 1. FRONT PANEL REMOVAL

**Note :** Be careful not to scratch the cabinet.




## 2. WIRING DIAGRAM




MICROFILM

# SPEAKER SYSTEM

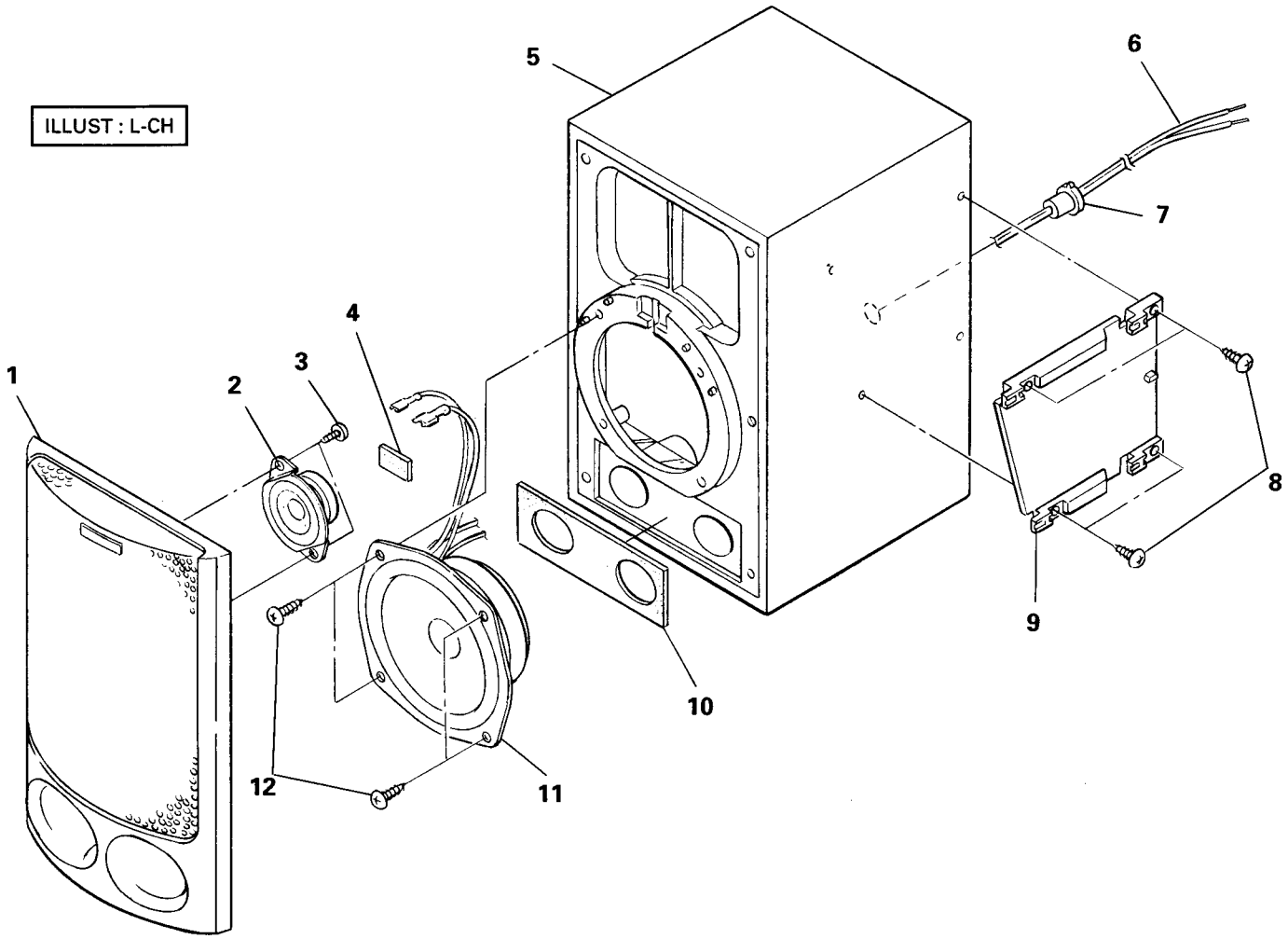
SONY®

## 3. EXPLODED VIEW AND PARTS LIST

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

ILLUST : L-CH




| Ref.No. | Part No. | Description | Remarks |
|---|---|---|---|
| 1 | X-4943-207-2 | PANEL (L) ASSY, FRONT (Including super tweeter) | |
| 1 | X-4943-208-2 | PANEL (R) ASSY, FRONT (Including super tweeter) | |
| 2 | 1-504-201-11 | SPEAKER (5CM) (Including Capacitor) | |
| 3 | 3-703-840-01 | SCREW, TAPPING | |
| 4 | 9-911-844-XX | PACKING | |
| * 5 | X-4943-209-2 | CABINET ASSY, SPEAKER (AEP, Italian, East European) | |
| * 5 | X-4943-210-2 | CABINET ASSY, SPEAKER (Germany) | |
| 6 | 1-574-792-11 | CORD, SPEAKER | |
| 7 | 4-870-003-00 | CLIPPER, CORD | |
| 8 | 4-874-614-61 | SCREW +BVTP 3.5X16 | |
| 9 | 4-950-752-01 | PANEL (L), SIDE | |
| 9 | 4-950-753-01 | PANEL (R), SIDE | |
| * 10 | 4-956-186-01 | PACKING | |
| 11 | 1-544-237-41 | SPEAKER (13CM) | |
| 12 | 4-874-614-11 | SCREW +BVTP 3.5X14 | |

**********

ACCESSORIES & PACKING MATERIALS

**********

| | | | |
|---|---|---|---|
| * | 4-957-168-01 | CUSHION | |


9-957-728-11

**Sony Corporation**

**Audio Group**

**English**

93B1929-1

Printed in Japan



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**Published by Audio Corporate Planning Group**

# HCD-H71/H71M

SONY

# SERVICE MANUAL

*AEP Model*
*E Model*
*Australian Model*
*Tourist Model*
*HCD-H71*

*AEP Model*
*UK Model*
*HCD-H71M*

# SUPPLEMENT-1

File this supplement with the service manual.

**Subject:**
1. DISASSEMBLY
2. BLOCK DIAGRAMS
3. MECHANICAL ADJUSTMENTS
4. ELECTRICAL ADJUSTMENTS

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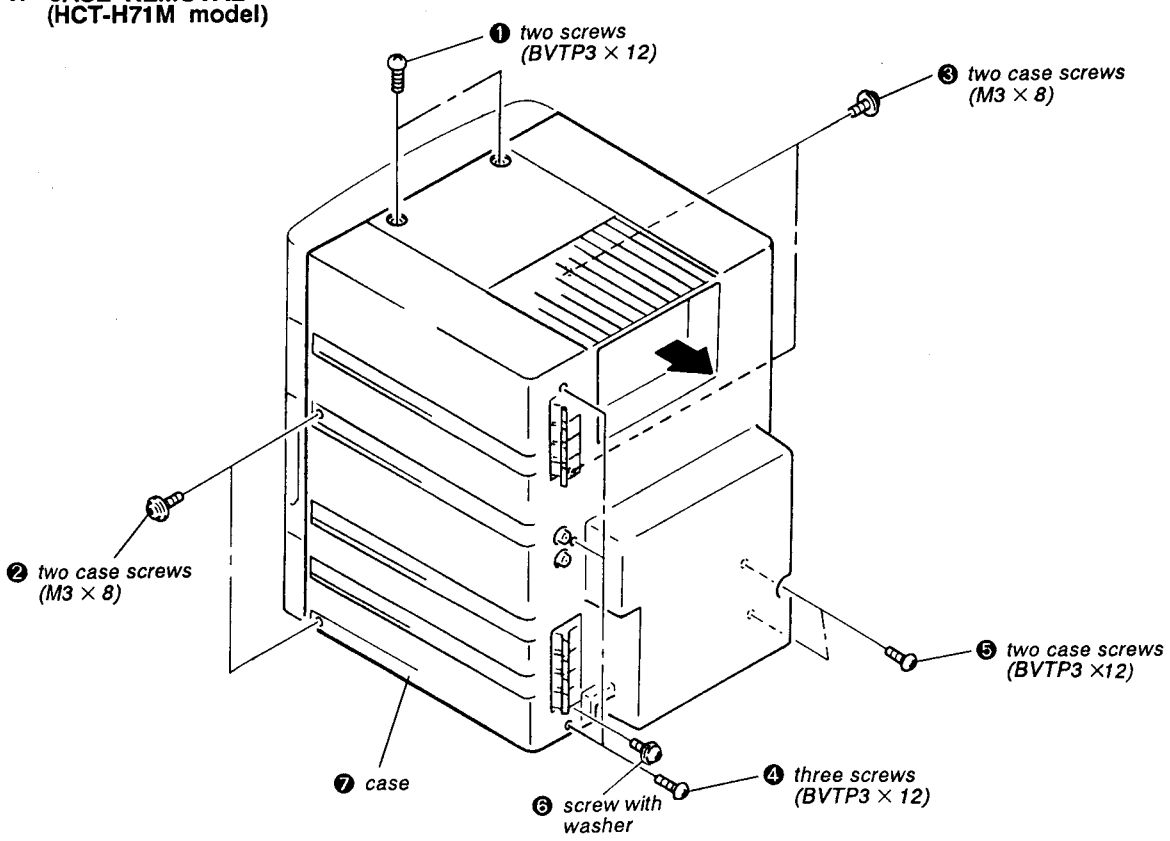
# SECTION 1
# DISASSEMBLY

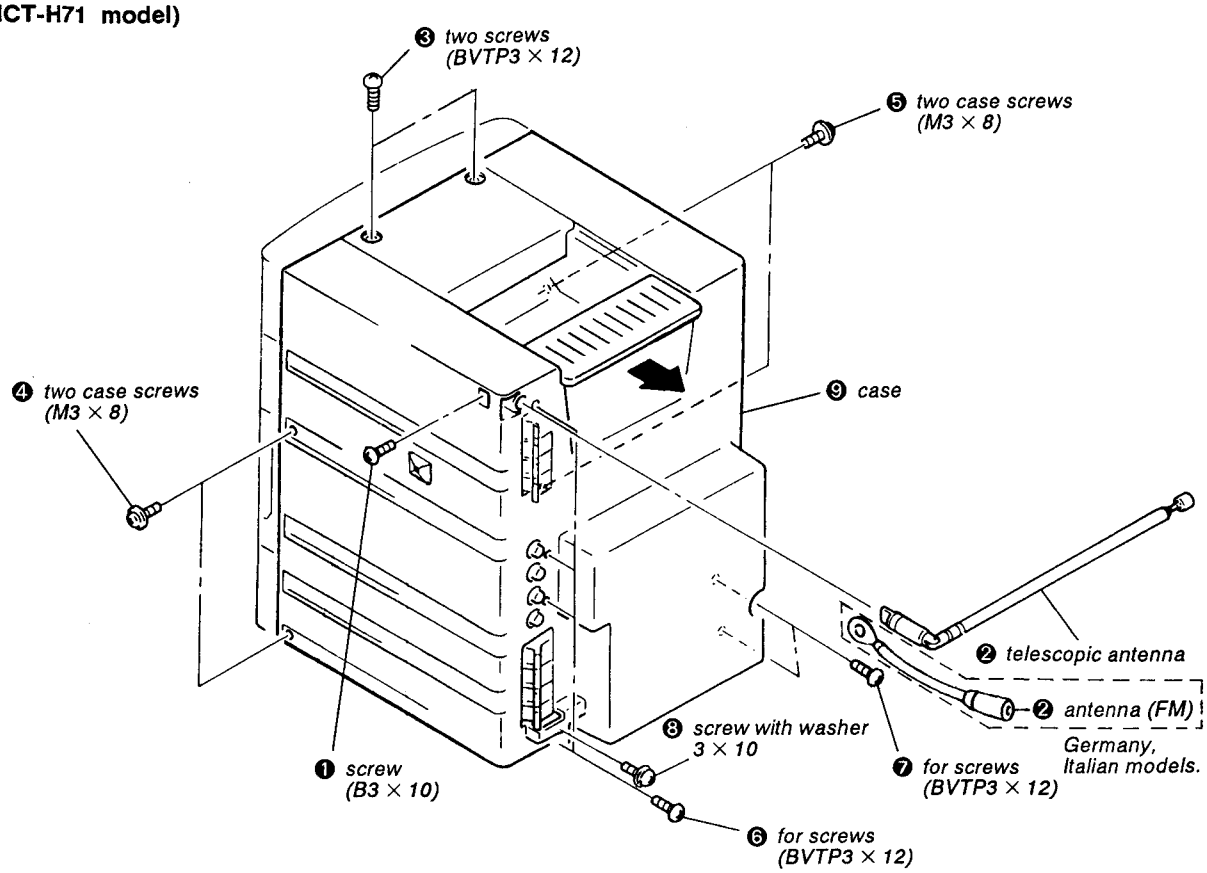
**Note:** Follow the disassembly procedure in the numerical order given.

## 1-1. CASE REMOVAL

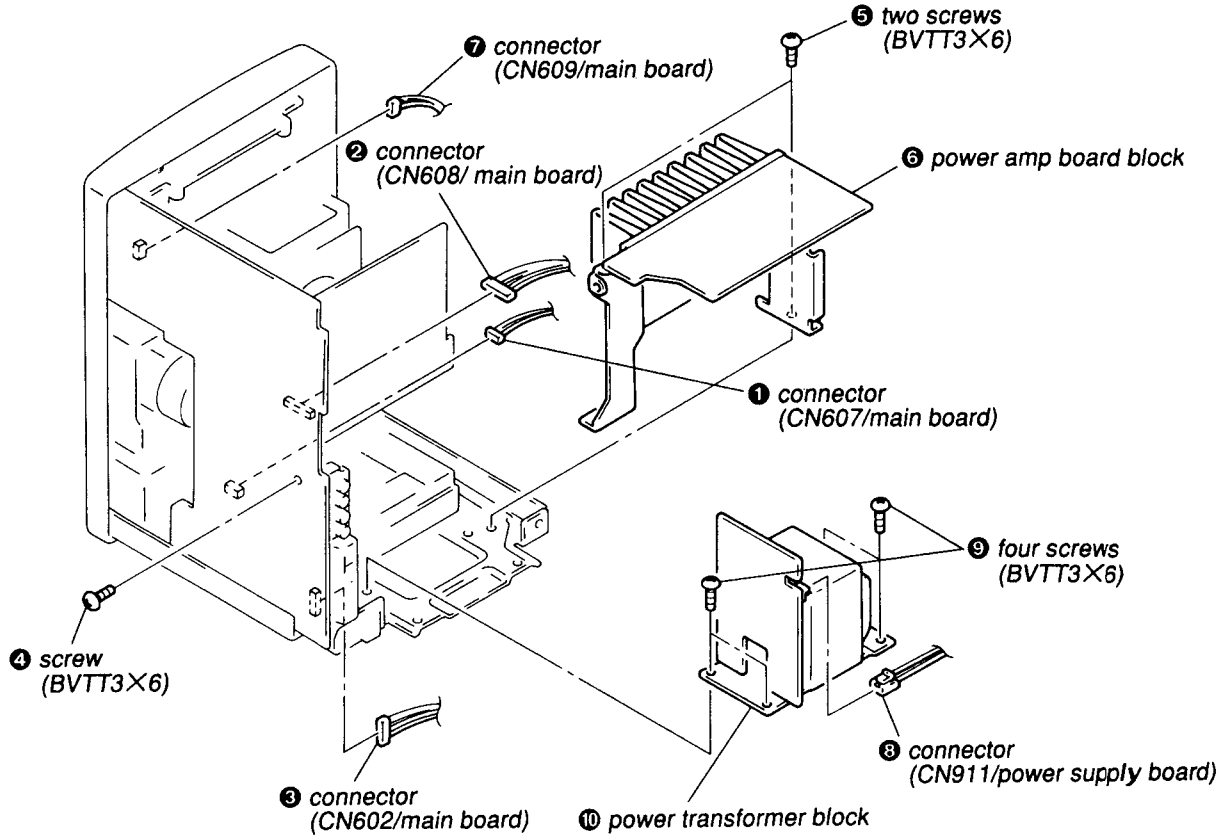
**(HCT-H71M model)**


❶ two screws (BVTP3 × 12)
❸ two case screws (M3 × 8)
❷ two case screws (M3 × 8)
❺ two case screws (BVTP3 ×12)
❼ case
❻ screw with washer
❹ three screws (BVTP3 × 12)

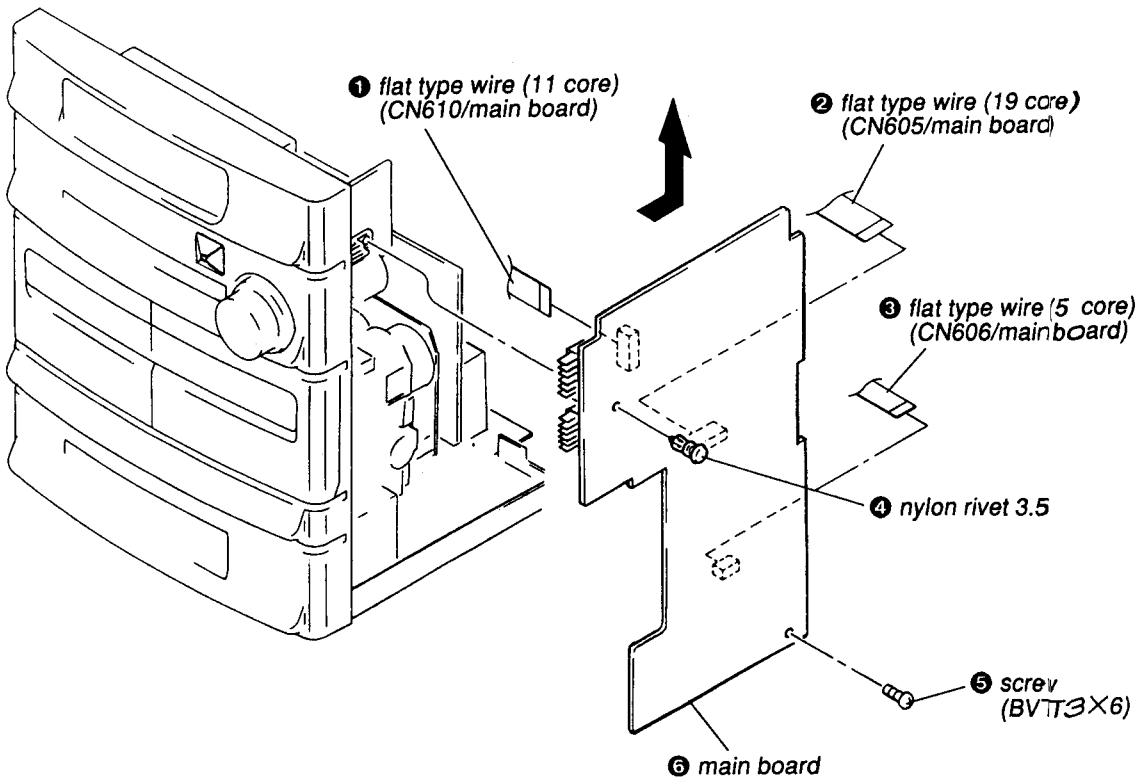
**(HCT-H71 model)**


❸ two screws (BVTP3 × 12)
❺ two case screws (M3 × 8)
❹ two case screws (M3 × 8)
❾ case
❷ telescopic antenna
❷ antenna (FM)
Germany, Italian models.
❽ screw with washer 3 × 10
❶ screw (B3 × 10)
❼ for screws (BVTP3 × 12)
❻ for screws (BVTP3 × 12)

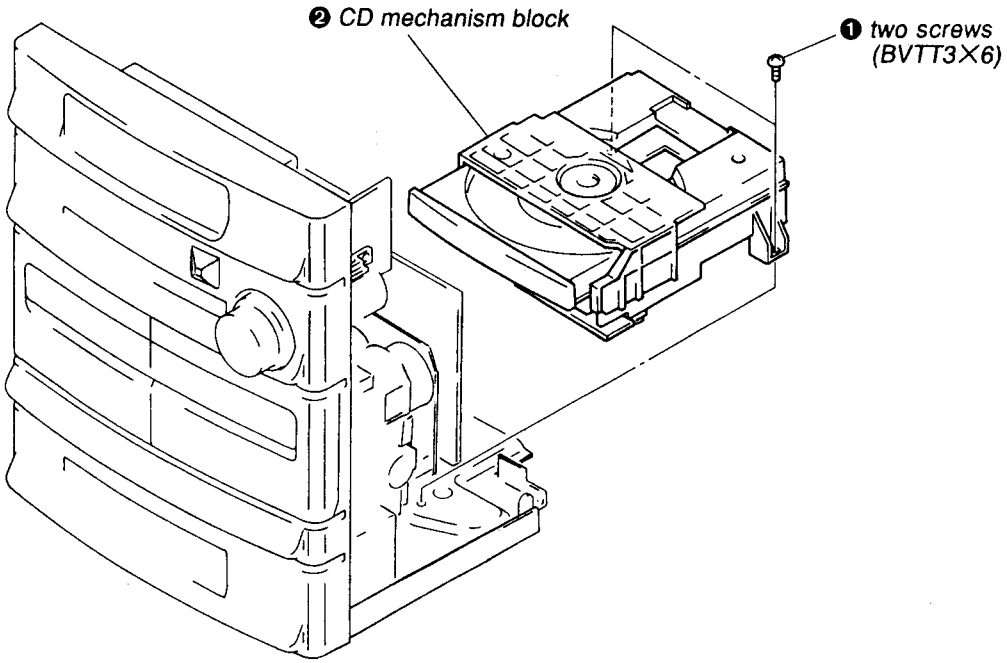
## 1-2. POWER BLOCK REMOVAL



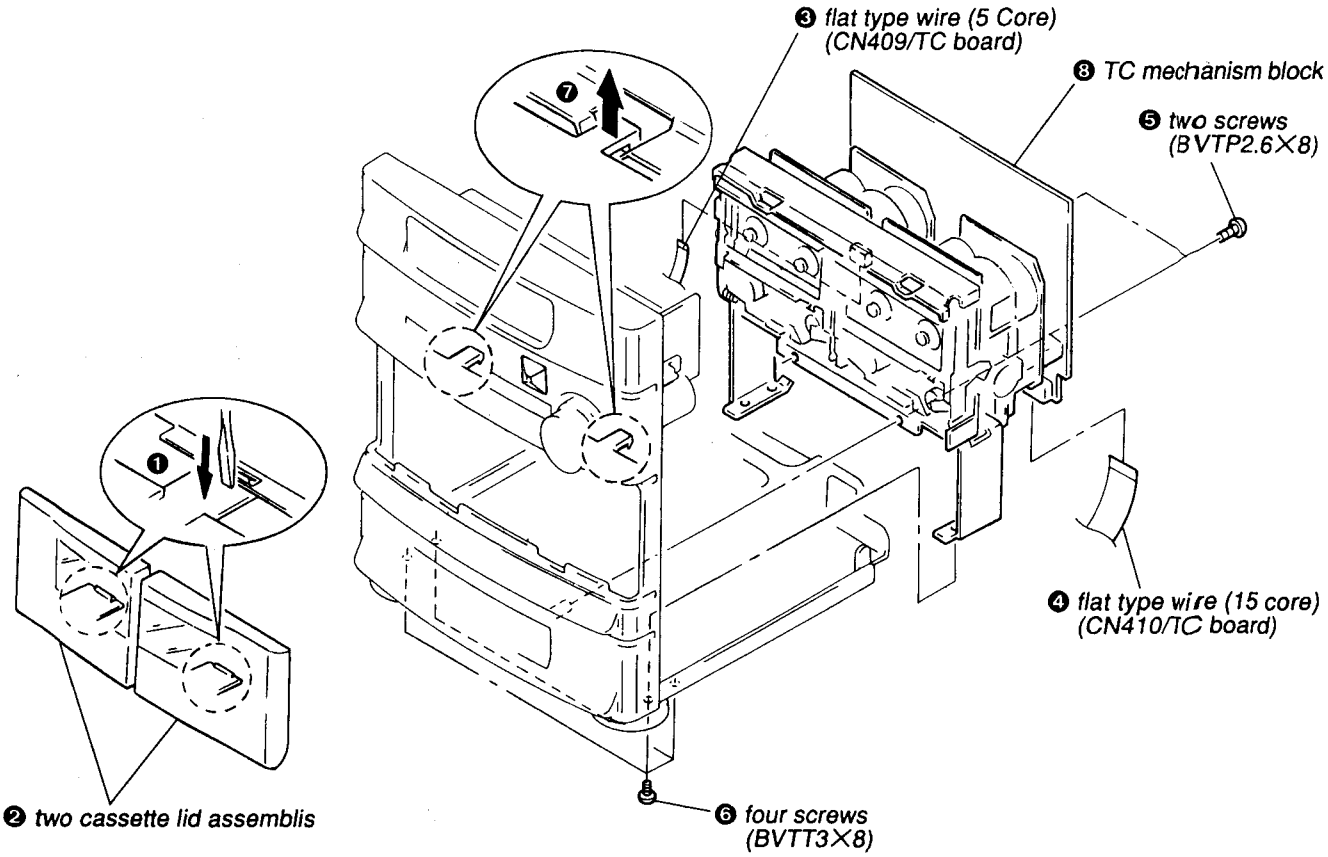

## 1-3. MAIN BOARD REMOVAL



## 1-4. CD MECHANISM BLOCK REMOVAL

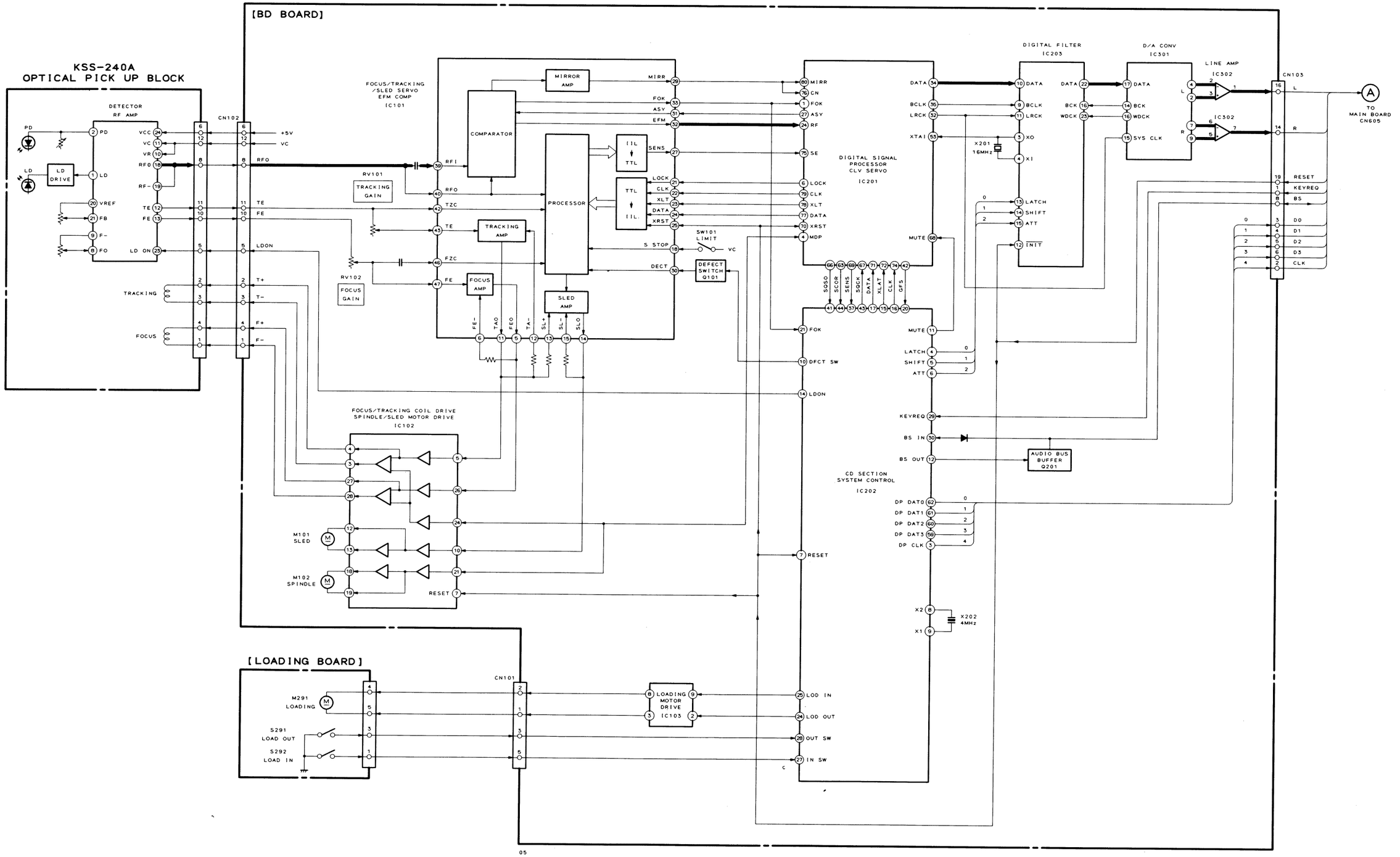



## 1-5. TC MECHANISM BLOCK REMOVAL

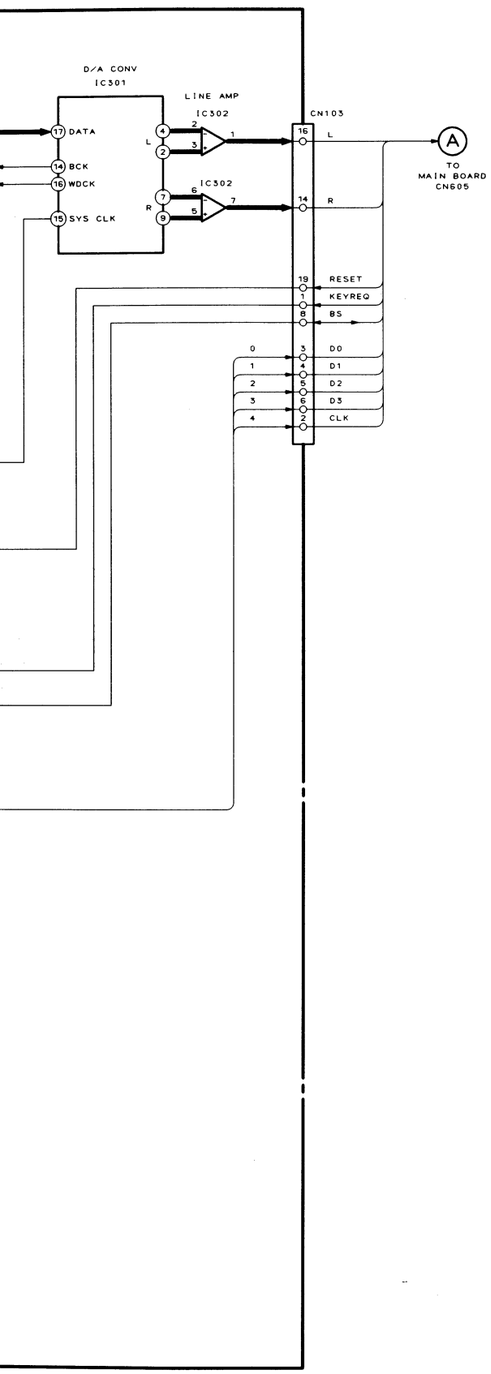


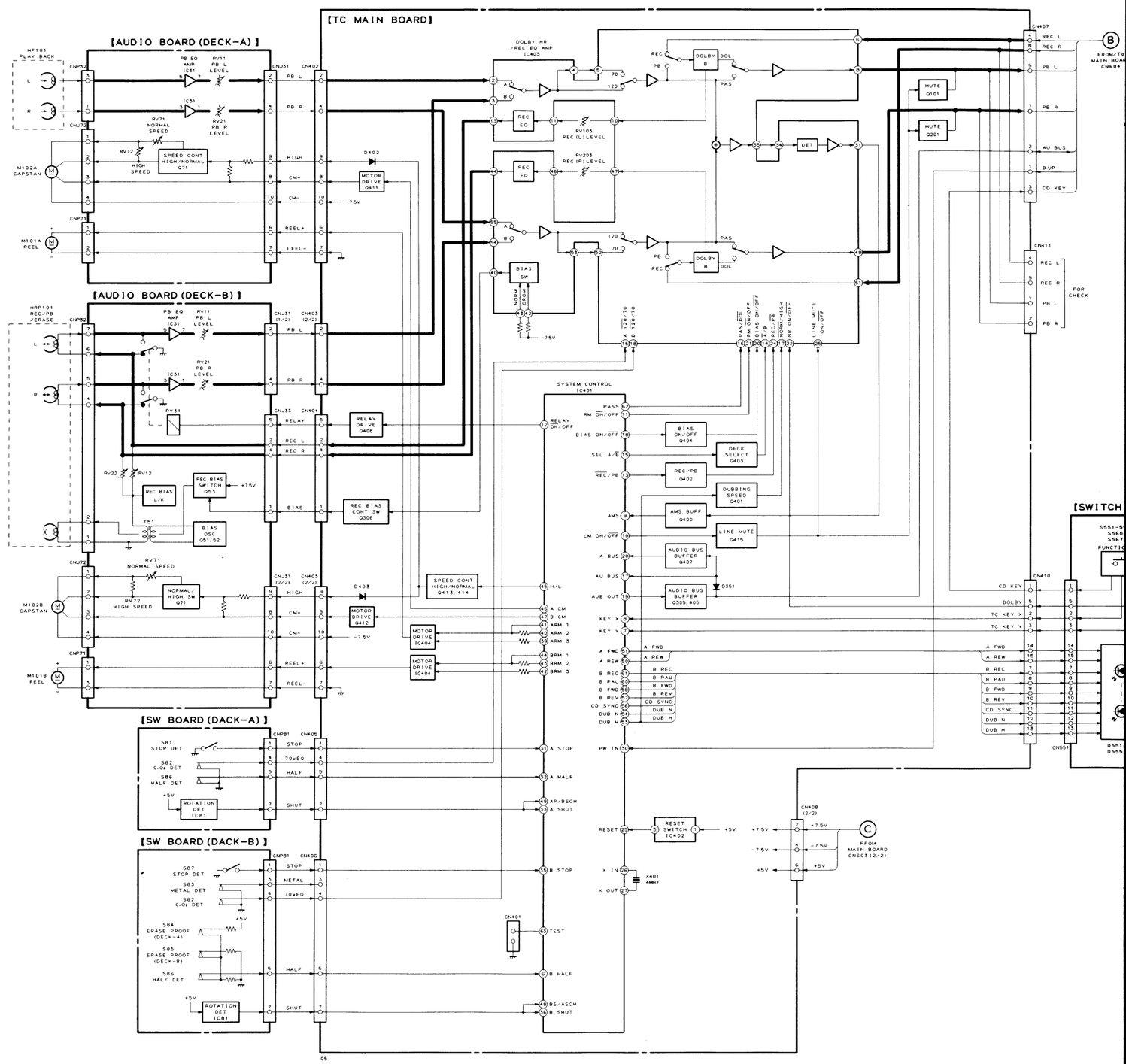
# SECTION 2
# BLOCK DIAGRAMS

## 2-1. CD SECTION BLOCK DIAGRAM

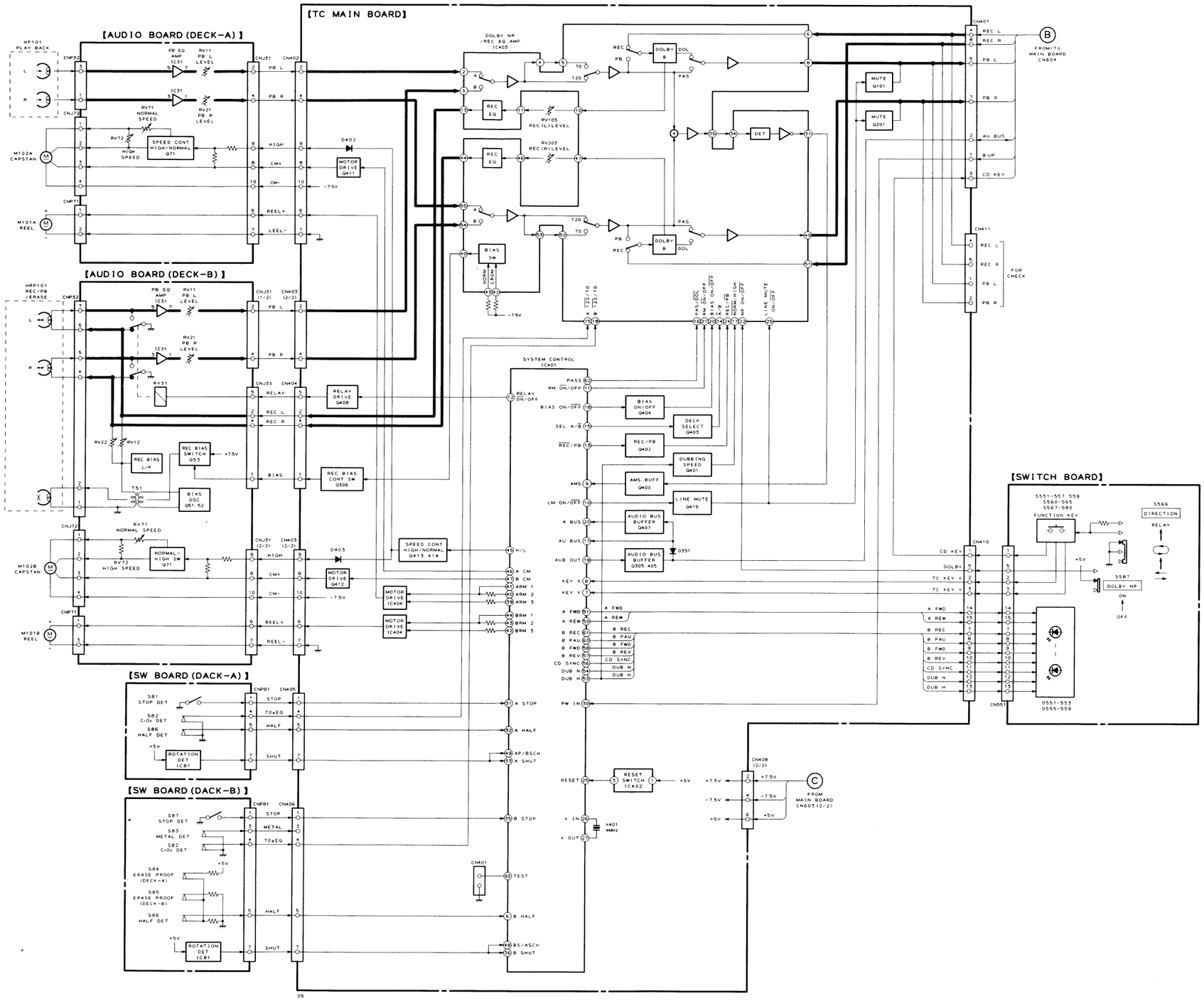


## 2-2. TC SECTION BLOCK DIAGRAM

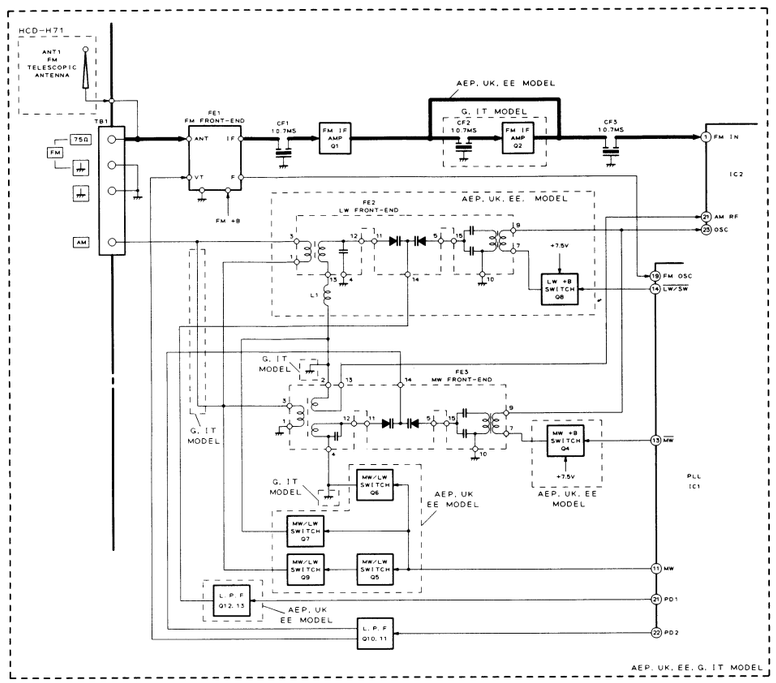


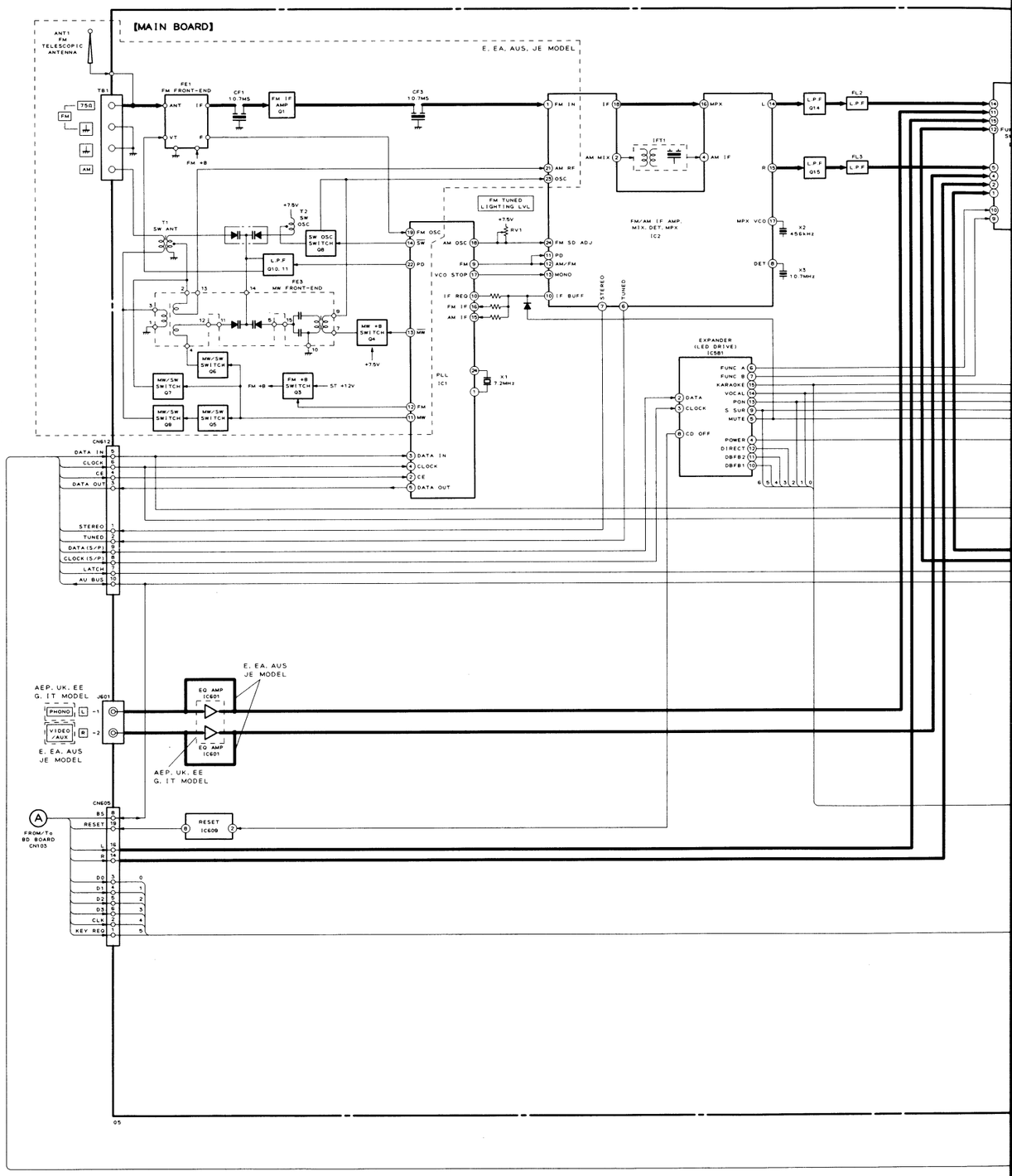



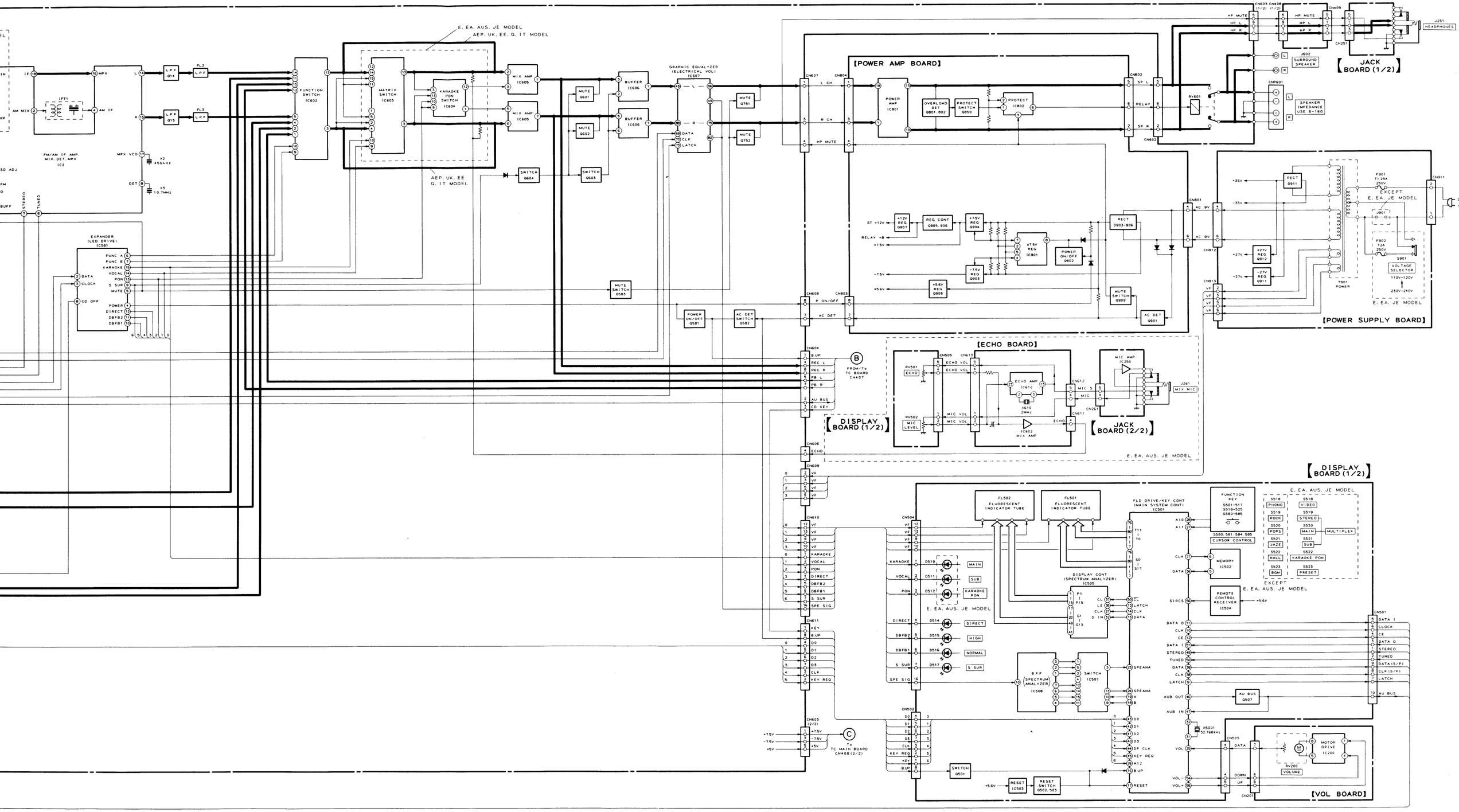
## CTION BLOCK DIAGRAM

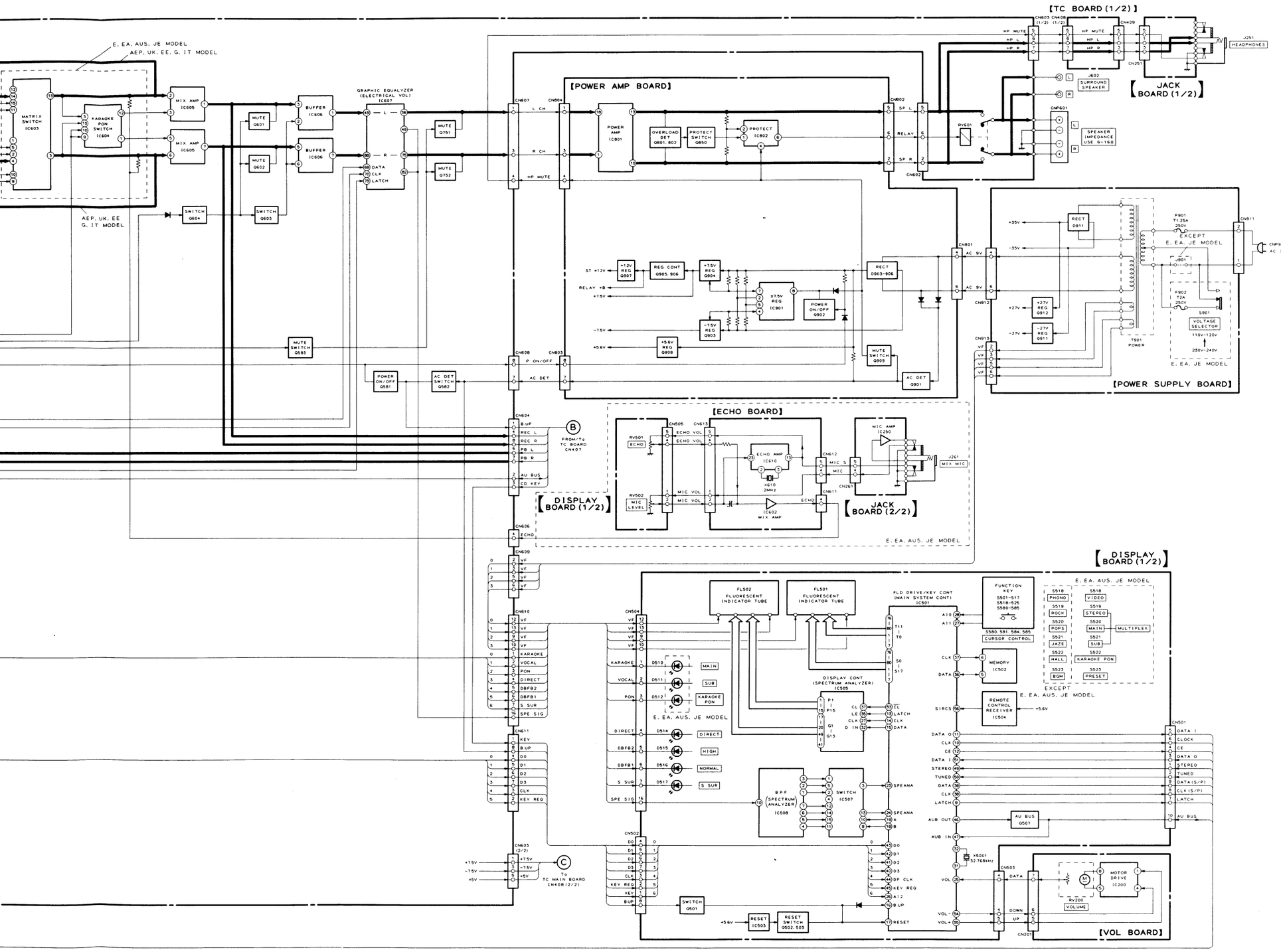


## 2-3. MAIN SECTION BLOCK DIAGRAM




E, EA, AUS, JE MODEL
AEP, UK, EE, G, IT MODEL
AEP, UK, EE G, IT MODEL
【TC BOARD (1/2)】
【POWER AMP BOARD】
【ECHO BOARD】
【DISPLAY BOARD (1/2)】
【JACK BOARD (1/2)】
【JACK BOARD (2/2)】
【POWER SUPPLY BOARD】
【VOL BOARD】
FM/AM IF AMP. MIX, DET, MPX IC2
FUNCTION SWITCH IC602
MATRIX SWITCH IC603
KARAOKE PON SWITCH IC604
GRAPHIC EQUALYZER (ELECTRICAL VOL) IC607
EXPANDER (LED DRIVE) IC581
POWER AMP IC801
OVERLOAD DET Q801, 802
PROTECT SWITCH Q850
PROTECT IC802
SPEAKER IMPEDANCE USE 6~16Ω
HEADPHONES
SURROUND SPEAKER
EXCEPT E, EA, JE MODEL
VOLTAGE SELECTOR
110V~120V
230V~240V
FL502 FLUORESCENT INDICATOR TUBE
FL501 FLUORESCENT INDICATOR TUBE
FLD DRIVE/KEY CONT (MAIN SYSTEM CONT) IC501
DISPLAY CONT (SPECTRUM ANALYZER) IC505
B.P.F (SPECTRUM ANALYZER) IC508
FUNCTION KEY
CURSOR CONTROL
MEMORY IC502
REMOTE CONTROL RECEIVER IC504
AU BUS Q507
MOTOR DRIVE IC200
VOLUME
RESET IC503
RESET SWITCH Q502, 503
SWITCH Q501
MUTE SWITCH Q583
POWER ON/OFF Q581
AC DET SWITCH Q582
FROM/To TC BOARD CN407
To TC MAIN BOARD CN408 (2/2)


【TC BOARD (1/2)】
【POWER AMP BOARD】
【ECHO BOARD】
【DISPLAY BOARD (1/2)】
【JACK BOARD (2/2)】
【JACK BOARD (1/2)】
【POWER SUPPLY BOARD】
【VOL BOARD】
E, EA, AUS, JE MODEL
AEP, UK, EE, G, IT MODEL
MATRIX SWITCH IC603
KARAOKE PON SWITCH IC604
MIX AMP IC605
BUFFER IC606
GRAPHIC EQUALYZER (ELECTRICAL VOL) IC607
POWER AMP IC801
OVERLOAD DET Q801, 802
PROTECT SWITCH Q850
PROTECT IC802
RV601
SPEAKER IMPEDANCE USE 6-16Ω
J602 SURROUND SPEAKER
J251 HEADPHONES
RECT D911
F901 T1.25A 250V
EXCEPT E, EA, JE MODEL
F902 T2A 250V
VOLTAGE SELECTOR
110V-120V
230V-240V
+27V REG Q912
-27V REG Q911
T901 POWER
RECT D903-906
+12V REG Q907
REG CONT Q905, 906
+7.5V REG Q904
-7.5V REG Q903
+5.6V REG Q908
7.5V REG IC901
POWER ON/OFF Q902
MUTE SWITCH Q909
AC DET Q901
MUTE Q601
MUTE Q602
MUTE Q751
MUTE Q752
SWITCH Q604
SWITCH Q605
MUTE SWITCH Q583
POWER ON/OFF Q581
AC DET SWITCH Q582
FROM/To TC BOARD CN407
To TC MAIN BOARD CN408(2/2)
MIC AMP IC250
ECHO AMP IC610
X610 2MHz
IC602 MIX AMP
RV501 ECHO
RV502 MIC LEVEL
J261 MIX MIC
FL502 FLUORESCENT INDICATOR TUBE
FL501 FLUORESCENT INDICATOR TUBE
FLD DRIVE/KEY CONT (MAIN SYSTEM CONT) IC501
FUNCTION KEY S501-517 S518-525 S580-585
S580, 581, 584, 585 CURSOR CONTROL
MEMORY IC502
REMOTE CONTROL RECEIVER IC504
DISPLAY CONT (SPECTRUM ANALYZER) IC505
B.P.F (SPECTRUM ANALYZER) IC508
SWITCH IC507
AU BUS Q507
X5001 32.768kHz
MOTOR DRIVE IC200
RV200 VOLUME
RESET IC503
RESET SWITCH Q502, 503
SWITCH Q501
MAIN
SUB
KARAOKE PON
HIGH
NORMAL
S SUR
PRESET
VIDEO
PHONO
ROCK
POPS
JAZZ
HALL
BGM
STEREO
MULTIPLEX

# SECTION 3
# MECHANICAL ADJUSTMENTS

### PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback head — pinch roller
   erase head — rubber belt
   capstan — idler
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustment should be performed with the rated power supply voltage unless otherwise noted.

**• Torque Measurement**

| Torque | Torque meter | Meter reading |
|---|---|---|
| Forward | CQ-102C | 35 to 60g • cm (0.49 to 0.83oz • inch) |
| Forward back tension | CQ-102C | 2 to 6g • cm (0.028 to 0.08oz • inch) |
| Reverse | CQ-102RC | 35 to 60g • cm (0.49 to 0.83oz • inch) |
| Reverse back tension | CQ-102RB | 2 to 6g • cm (0.028 to 0.08oz • inch) |
| FF/REW | CQ-201B | 70 to 110g • cm (0.98 to 1.52oz • inch) |

# SECTION 4
# ELECTRICAL ADJUSTMENTS

**DECK SECTION**

1. The adjustment should be performed in the publication. (Be sure to make playback adjustment at first.)
2. The adjustment and measurement should be performed for both L-CH and R-CH.
   • Switch position
   DOLBY NR switch: OFF
3. Perior to electrical adjustments, short the connector CN401 (test mode).

**• Test Tape**

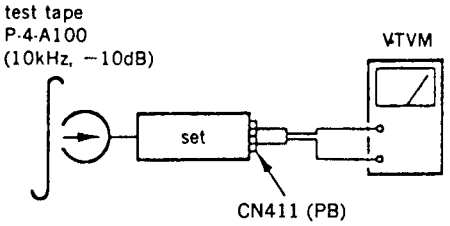
| Tape | Contents | Use |
|---|---|---|
| P-4-A100 | 10kH, −10dB | Head Azimuth Adjustment |
| P-4-L300 | 315Hz, 0dB | Level Adjustment |
| WS-48B | 3kHz, 0dB | Tape Speed Adjustment |

**Record/Playback Head Azimuth Adjustment**

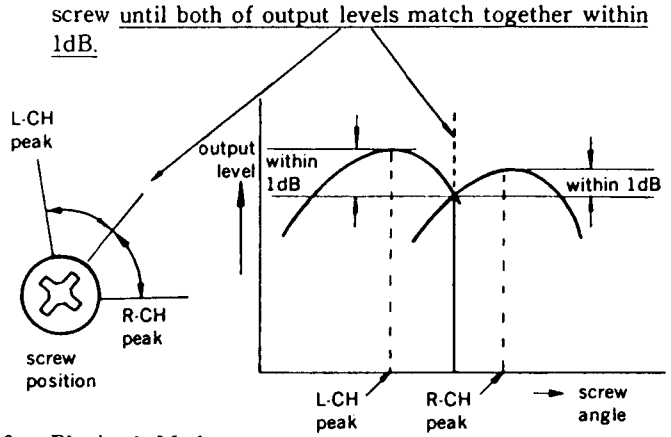
**DECK A** **DECK B**

**Procedure:**

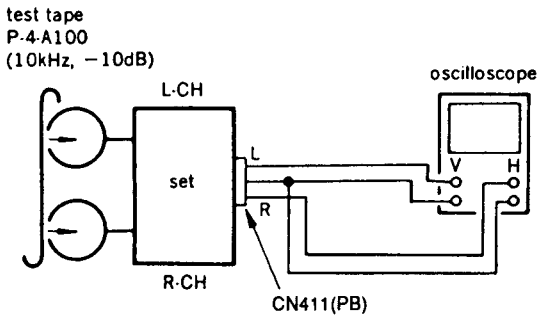
1. Forward Playback Mode
   Reverse Playback Mode

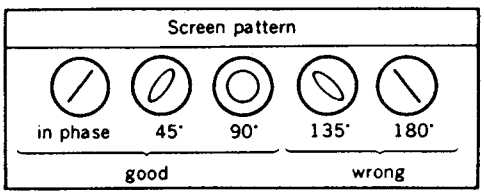


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.




3. Playback Mode

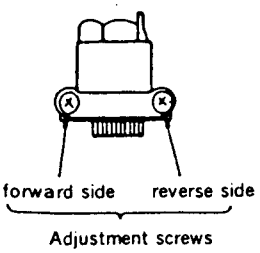


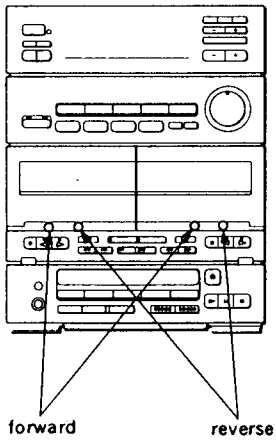




4. Change the review playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screw with suitable locking compound.

**Adjustment Location :**

—record/playback head (deck A and B)



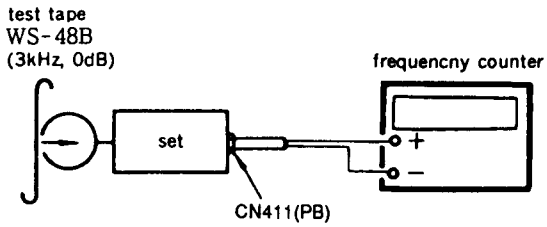




## Tape Speed Adjustment DECK A DECK B

**Procedure :**

- Perform high speed adjustment before normal speed adjustment.

Mode : playback




| Speed | Deck | Adjustment | Frequency counter |
|---|---|---|---|
| ※High | A | RV72 | 5,970 to 6.030Hz |
| | B | RV72 | |
| Normal | A | RV71 | 2,985 to 3,015Hz |
| | B | RV71 | |

※ Continue to press HIGH SPEED DUBBING switch (S557) in playback mode : High speed playback.

Frequency difference between the begining and the end of the tape should be within ±3%.

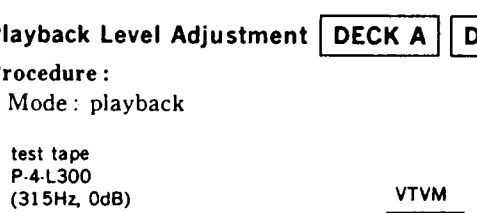
Frequency difference between deck A and deck B the biginning of the tape should be within 1.5%.

**Adjustment Location:** MD (AX) and MD (BX) boards.

## Playback Level Adjustment DECK A DECK B

**Procedure :**

Mode : playback




Deck A is RV11 (L-CH) and RV21 (R-CH), deck B is RV11 (L-CH) and RV21 (R-CH) so that adjustment within adjustment level as follows.

**Adjusment Level :**

LINE OUT level : −12.7 ± 1.0dB (0.16 to 0.20V)

Level Difference between Channels : within 0.5dB

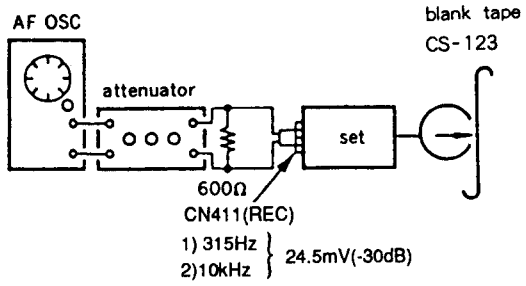
Confirm the DOLBY OUT level does not change in playback mode while changing the mode from playback to stop several times.

**Adjustment Location :** MD (AX) and MD (BX) boards

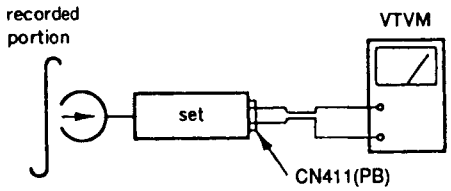
## Record Bias Adjustment DECK B

**Procedure :**

1. record mode




2. playback mode




Confirm playback the signal recorded in step 1 become adjustment level as follows.
If these levels do not adjustment level, adjusment the RV12 (L-CH) and RV22 (R-CH) to repeat step 1 and 2.

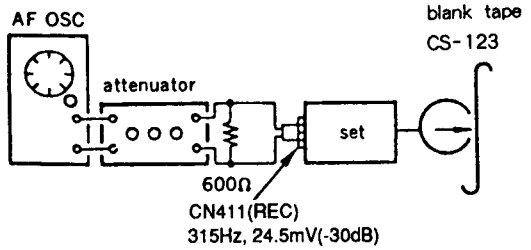
**Adjusment level :** Playback output of 315Hz to playback output of 10kHz : −0.5dB to 0.5dB.

**Adjustment Location :** MD (BX) board

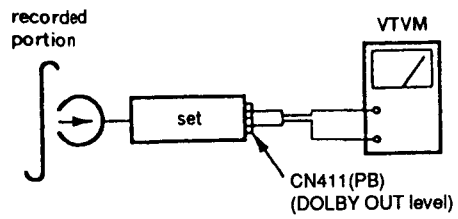
## Record Level Adjustment DECK B

**Procedure :**

1. record mode




2. playback mode



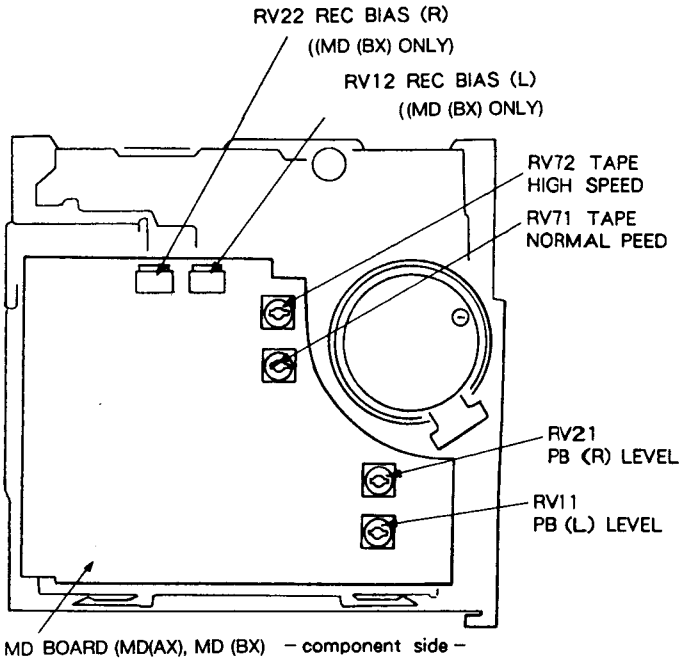

Confirm playback the signal recorded in step become adjustment level as follows.
If these levels do not adjustment level, adjusment the RV103 (L-CH) and RV203 (R-CH) to repeat step 1 and 2.

**Adjusment Level :**
DOLBY OUT level : −39.0dB±0.5dB (8.2 to 9.2mV)

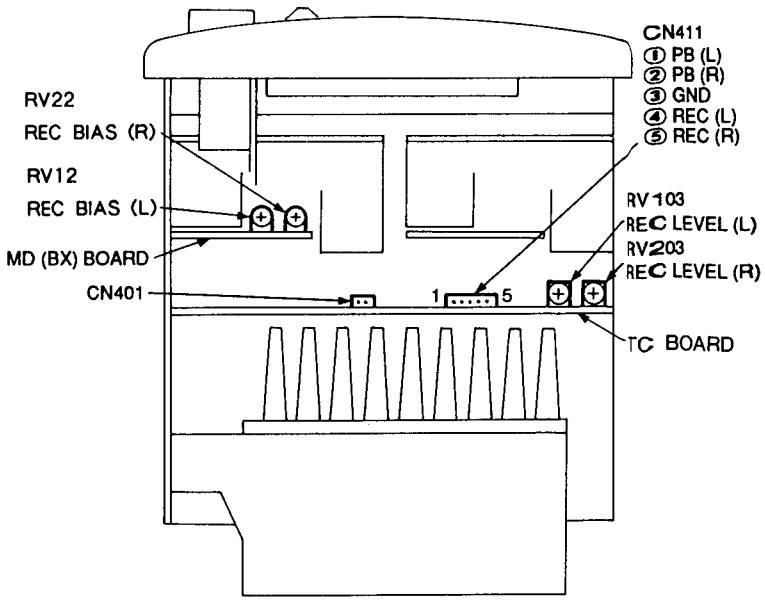
**Adjustment Location :** TC board

**Adjustment Location :**

Mechanism deck − rear side −




TC board − component side −

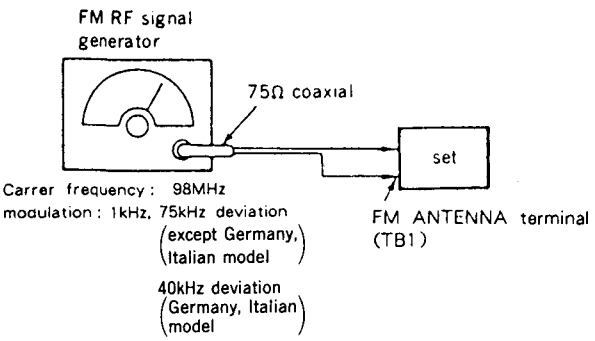


## TUNER SECTION

Note : As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

### FM SECTION ADJUSTMENTS

Setting :




### FM Tuned Indication Lighting Level Adjustment

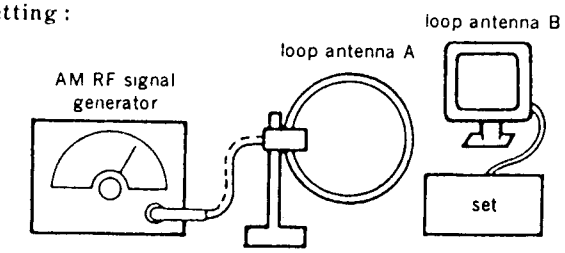
Band : FM

**Procedure:**

1. Germany, Italian model:
   Supply a 11 $\mu$ V (21dB $\mu$ ) 98MHz signal from the ANTENNA terminal.
   except Germany, Italian model:
   Supply a 13 $\mu$ V (23dB $\mu$ ) 98MHz signal from the ANTENNA terminal.
2. Tune the set to 98MHz.
3. Adjust RV1 so thta the TUNED light up.
4. Germany, Italian model:
   Confirm that that TUNED light off with FM RF signal generator output level set at 18dB $\mu$ .
   except Germany, Italian model:
   Confirm that the TUNED light off with FM RF signal generator output level set at 20dB $\mu$ .

### AM SECTION ADJUSTMENTS

Setting :




30% amplitude modulation by 400Hz signal

### SW OSC Voltage Adjustment

Band : SW

**Procedure :**

1. Connect the VOM to JW693 (OSC).
2. Tune the set to 5.95MHz.
3. Adjust T2 for 1.0 to 1.1 V reading on the VOM.
4. Tune the set to 17.90MHz.
5. Adjust CT2 for 8.4 to 8.6 V reading on the VOM.

### SW Tracking Adjustment

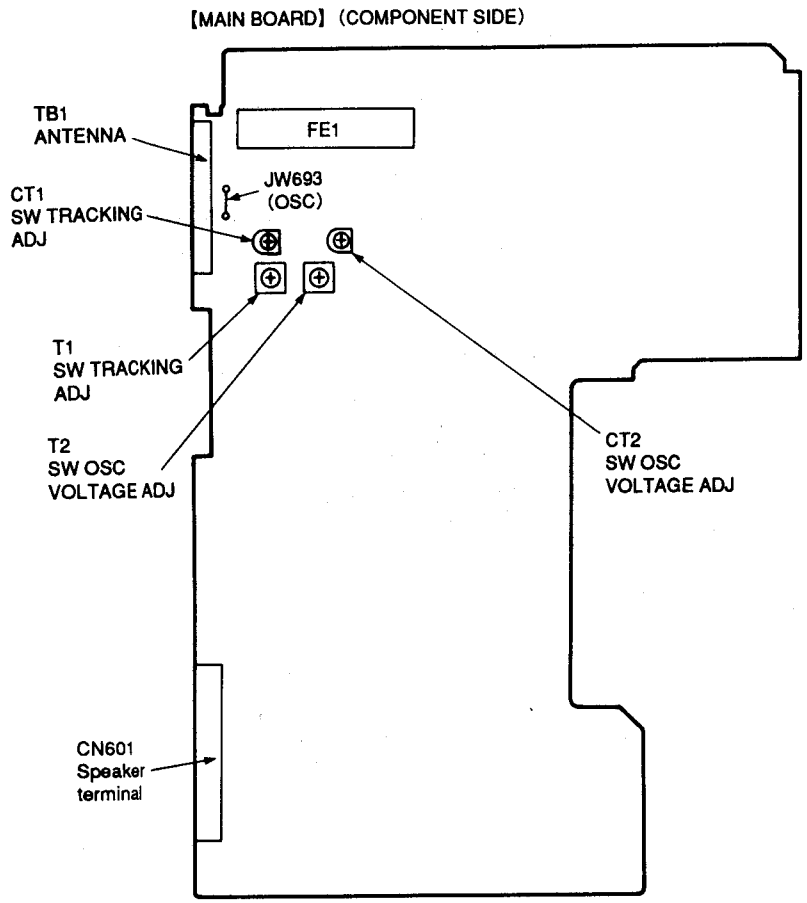
Band : SW

**Procedure :**

1. Connect the VOM to speaker terminal.
2. Adjust for a maximam reading on VOM(CN601).

| Signal generator and Set frequency | Adjustment part |
|---|---|
| 7.0MHz | T1 |
| 17.0MHz | CT1 |

**Adjustment Location :** main board —component side—

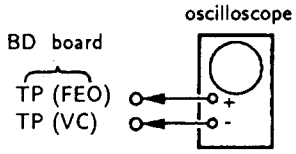


**CD SECTION**

**Note :**

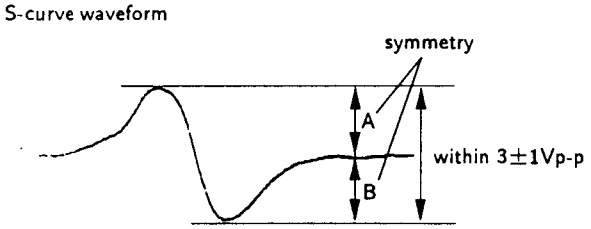
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

## S-Curve Check




**Procedure :**

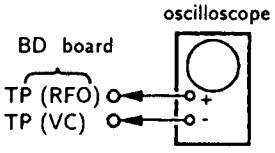
1. Connect oscilloscope to test point TP (FEO) on BD board.
2. Connect between test point TP (FES) and TP (VC) by lead wire.
3. Turned Power switch on and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
4. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3±1Vp-p.




5. After check, remove the lead wire connected in step 2.

**Note :** · Try to measure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.
· Take sweep time as long as possible and light up the brightness to obtain best waveform.

## RF Level Check

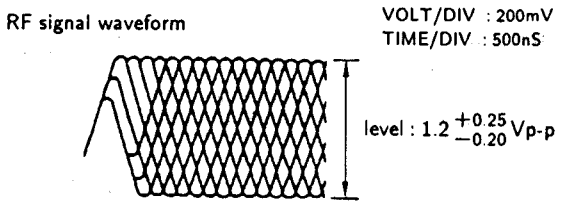



**Procedure :**

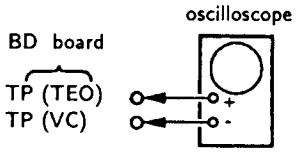
1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turn Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

**Note :**

Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

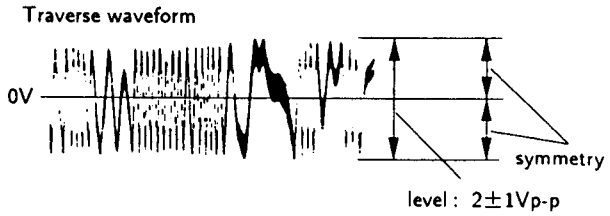



## E-F Balance Check




**Procedure :**

1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TEO) on BD board.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the osilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

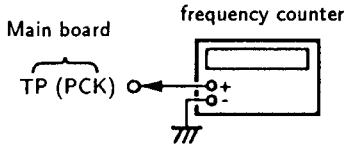



6. Remove the lead wire connected in step 1.

### RF PLL Free-run Frequency Check

**Procedure :**

1. Connect frequency counter to test point (PCK) with lead wire.



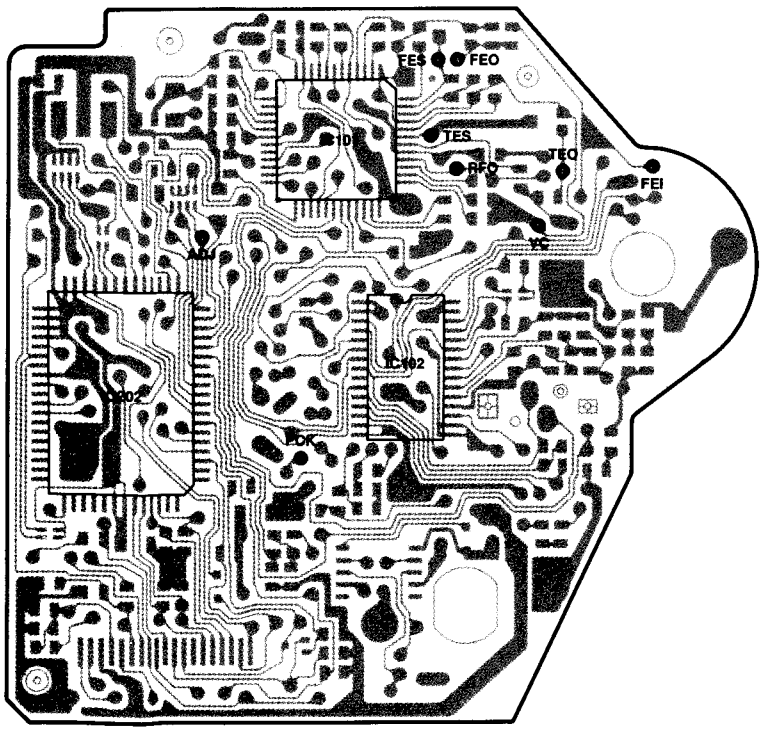

2. Turn Power switch on.
3. Confirm that reading on frequency counter is 4.3218 MHz.

### Focus/Tracking Gain

This gain has a margin, so even if it is slightly off. There is no problem.
Therefore, do not perform, this adjustment.
Please note that it should be fixed to mechanical center position when you moved and do not know original position.

### Adjustment Location :

【BD BOARD】**(SIDE B)**



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